

Australian

NOVEMBER/DECEMBER, 1980. ISSUE 105. Vol. 9 No. 12

\$1.20*

MODEL RAILWAY

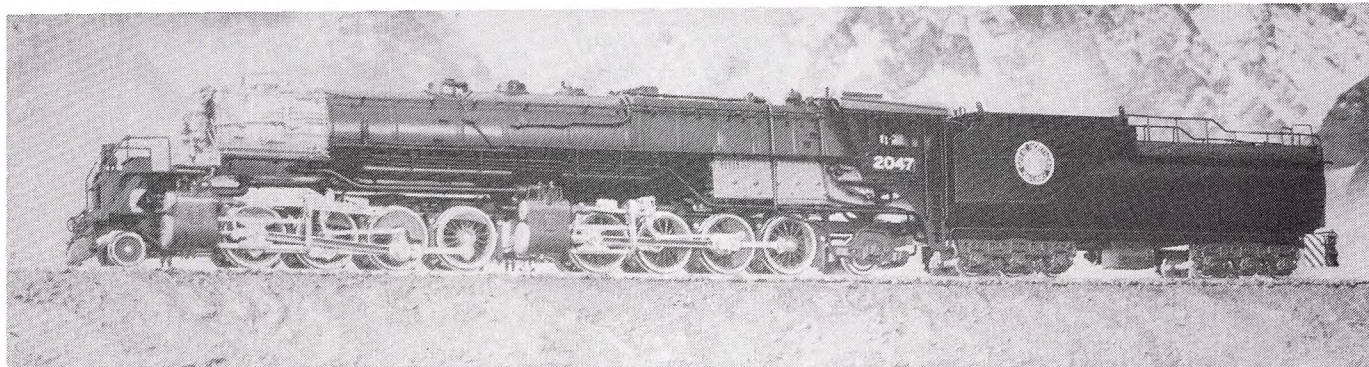
Magazine



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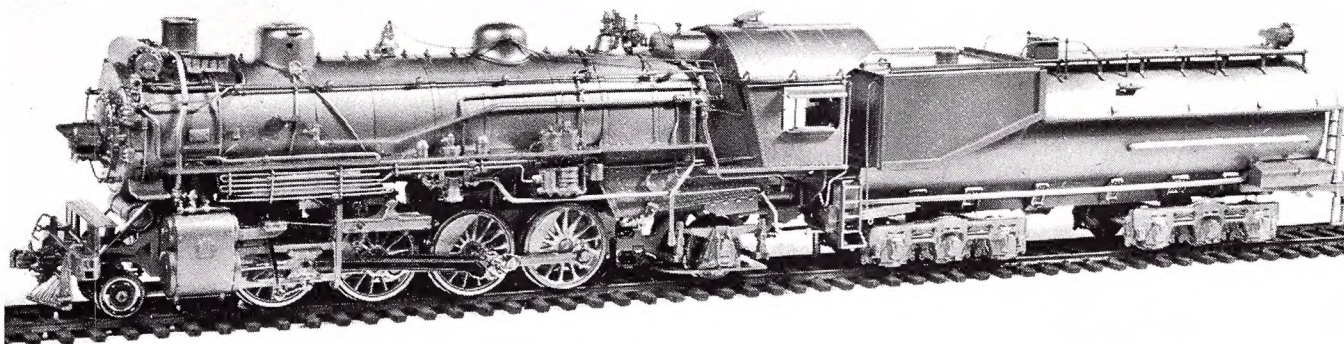
NEW!
— FROM THE SHOPS OF

Tenshodo
 "THE MARK OF QUALITY"
 天賞堂



GREAT NORTHERN 2-8-8-2 'R-2' LOCOMOTIVE & TENDER, FINISHED IN 'GLACIER PARK' LIVERY.
 PRICE \$1325.00.

— FROM THE SHOPS OF **ALCO**
 MODELS



HO SOUTHERN PACIFIC 'MK-6' 2-8-2 LOCOMOTIVE & TENDER, FEATURING ELESKO FEEDWATER HEATER, SPORT MODEL CAB & LARGE, 12,000 GALLON, VANDERBILT TENDER. PRICE: \$374.50.

DUE OCTOBER . . .
 THE MASSIVE UP DD-35
 'A' & 'B' UNITS, WITH THEIR
 4 AXLE TRUCKS . . .

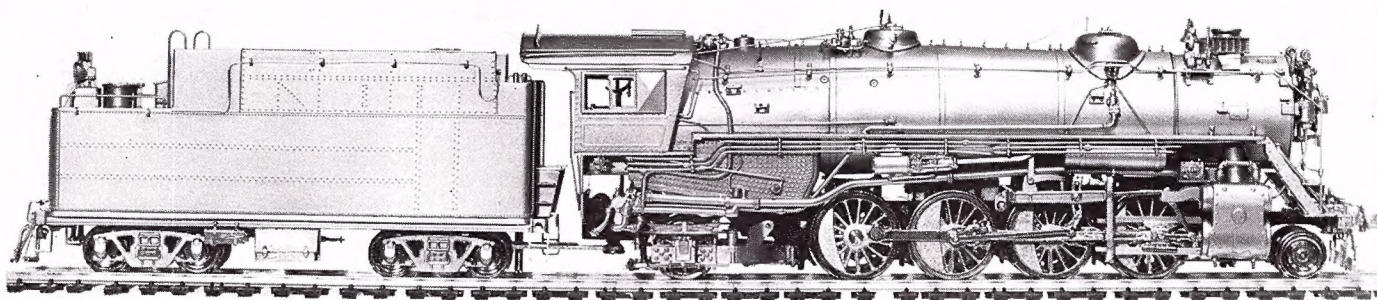
Prototype photo
 by Union Pacific



BOTH HO UNITS POWERED AND DRIVEN ON ALL AXLES THROUGH ENCLOSED AXLE HUNG GEARBOXES.
 PRICES: 'A' UNIT \$441.75; 'B' UNIT \$394.75.

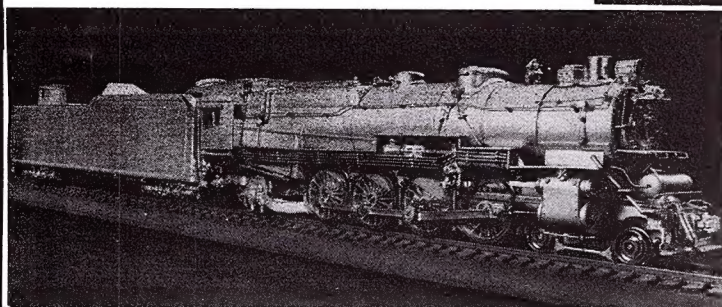
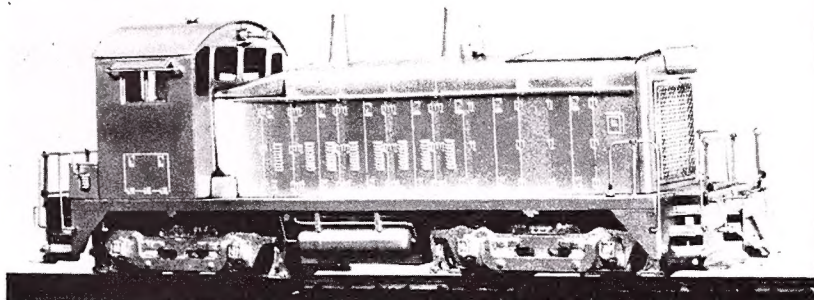
SOLE AGENT & IMPORTER
THE MODEL DOCKYARD PTY. LTD.
 216-218 SWANSTON ST. MELBOURNE. PHONE: 663 3505

NEW AND DUTY FREE! — FROM THE SHOPS OF KOREA

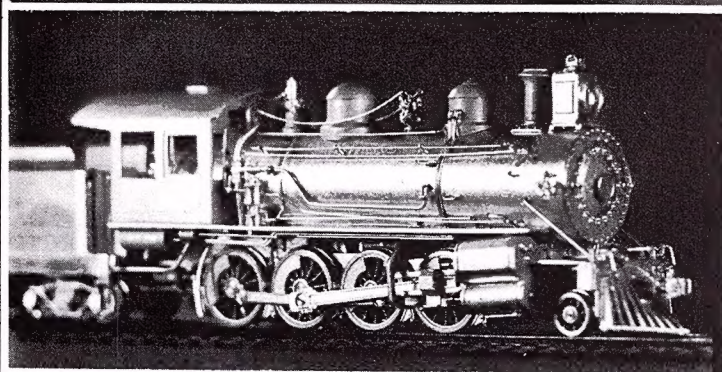


HO Great Northern 'O-3' 2-8-2 Locomotive & Tender, outshopped by Overland Models. These heavy USRA Locomotives are faithfully reproduced in every detail. Equipped with GN cabs, front mounted duplex air pumps, an enlarged oil bunker and pre-blackened frames. PRICE: \$378.55.

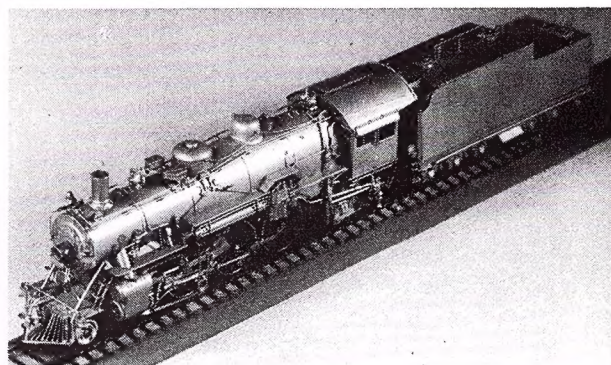
SW1200 Diesel Switcher, from the shops of Oriental Limited. Powered on all wheels, through enclosed axle hung gearboxes. Finely detailed throughout and featuring etched-through brass front screens, enclosing vertical shutters. SW900 Version also available. PRICE: Either model, \$194 ea.



HO Sunset PRR 'M-la' 4-8-2 Locomotive & Tender. Features high capacity long distance Tender. Comes with extra smoke box front, pilot and other front end details, to enable conversion for fast passenger working or freight service, as desired. PRICE: \$404.00.



HO Colorado Midland (No's 201-205) 2-8-0 Baldwin Vauclain compound Locomotive & Tender, by Hallmark Models. PRICE: \$249.65.



HO Santa Fe '3500' Class 4-6-2 Locomotive & Tender, by Hallmark Models. Built by Baldwin in 1914, the 35 Locomotives of this Class served system wide until the end of steam passenger and freight services. PRICE: \$245.50.

Other News from the *DOCKYARD* . . .

The long promised HO Southern Pacific Oakland, Alameda & Berkley (IER) MU Electric Cars are now to hand. These comprise: #300 Coach, powered @ \$244.85; #300 Coach, unpowered @ \$206.65; #438 Trailer Coach @ \$193.25; #600 Motor Combine @ \$244.85 and #700 Motor Baggage Car @ \$244.85 . . . From Hallmark Models' comes the HO DL-109 Diesel A Unit @ \$312.25 . . . Now available from Overland Models, in HO, is the UP #900005

Wedge Snow Plow @ \$94.95 . . . The first run of HO EMC 'E-2' A and B Diesel Set, with both Units powered, quickly sold out. Now Oriental Ltd have come up with a further limited run at the same price of \$560.15 per pair . . . For fans of the Santa Fe working in HO, Oriental Ltd have now delivered their fine "Super Chief" 8-Car Passenger Set. Made by Kumata, of Japan, this comes ready for the paint shop @ \$767.95 per set. . . .

continued page 4

SOLE AGENT & IMPORTER
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Other News from the *DOCKYARD* . . . Continued from page 3

New from Custom Brass, in HO, is the modern New Haven "washboard" AC/DC 3-Car MU Electric Train. Painted and finished @ \$434.85 per set . . . For narrow gauge fans working in HO_{N3}, Key Models have now delivered the Colorado & Southern #22 2-6-0 Loco & Tender @ \$297.00 . . . New, large stocks of Wrenn Locomotives and Rolling Stock are now to hand at Australia's keenest prices for the Wrenn range. For full details, remit \$4.00 for colour Catalogue & Price List, posted . . . For those hand laying track, stocks of Shinohara Code 70 nickel silver Rail should be available about the time these notes appear in print. Anticipated price is \$1.10 per metre. By mail order, in minimum lots of 20 lengths. Supplies will also be available through all our stockists of Shinohara Track . . . Also coming is a fine aid to track laying, due in September. The new American 'Shove It' Spiker Tool which is designed to accept Shinohara Code 100 and 70 Dog Spikes. Price: \$11.35 ea . . . Many new developments are now firming up for traction fans working in HO gauge. The recent ITS 273 Series Interurban Combine will soon be joined by the 510-514 Series Parlor-Observation Car and a little later, by the matching Trailer Sleeping Car, as well as the 516-527 Coach. The North Shore (ex-Oregon Electric) No 458 4-Truck Electric Locomotive is also coming up, as well as the South Shore 2-Truck Steeple Cab Electric Locomotive. In city cars, the Chicago Surface Lines 'Short Brill' Trolley is due about November and for scratch builders in traction, coming are motor 21E Single Truck, in addition to Brill 76E and 77E motorised Double Truck sets . . . In late November we expect to have the first of Alco Models new HO GP-30 Diesel Locomotives. The Standard and Low Hoods. Later will come the High Hood and powered UP version B Unit . . . The modern PRR 'K-4' Pacific will be next from "United", with stocks scheduled to arrive in September . . . Gem Models and Kumata have combined to present a finely detailed HO Reading 2-8-0 'I-10sa' Loco & Tender and stocks are expected about November . . . Shinohara's popular range of N scale Code 70

Flexible Track, Points and Crossings, will soon be further enhanced by the addition of a Double Slip Crossing. First stocks should be available by the time this issue is released . . . The popular Caboose Industries HO Point Levers, of both Rigid and Sprung pattern, are now joined by similar Levers for modellers working in N scale. Ridig Stand @ \$1.50 ea and Sprung Stand @ \$1.90 ea. Stocks are available through all our dealers handling Shinohara Track and word is already out that fine scalers working in HO are already 'trying out' these small Levers! . . . For narrow gaugers working in HO_{N2½}, fresh stocks of Locomotives and Rolling Stock are now to hand from Liliput. For covering Price List, send stamped SAE. . . Hallmark Models' fine O gauge FT 'A' & 'B' Diesel Locomotives are now in stock. 'A' Powered, 'B' Dummy. Detailed down to opening cab doors! Price: \$450.00. . . For fans of the Union Pacific in HO, Overland Models have now delivered the massive #900081 Diesel-electric Rotary Snowplow. The blades of which are motorised and operational in forward movement only. Fitted with working directional snow spout and full cab detail. Price: \$379.85. . . Expected from Custom Brass, in HO, about November, are Pacific Electric Series 1032 and 1362 Interurban Cars. Both to come with painted finish. . . For a copy of our new HO/HO_{N3} Brass Car & Loco. Price List, including postage, remit the sum of .88c. . . We are anxious to hear from all those who have been awaiting the production of the N & W "Jawn Henry" Steam Turbine Locomotive, in HO. After many unsuccessful attempts by others in the past, Alco Models plan to manufacture this Locomotive about the end of the year. The Locomotive will come with two Tenders and all axles under the Locomotive driven. However, production will be limited, so those requiring this model should make contact with us as a matter of urgency. . . Together with fresh stocks of the HO range to which new items have been added, Merit have now delivered first stocks of their new N scale range of lineside accessories. For full details, send for covering Price List, available for stamped SAE.

SOLE AGENT & IMPORTER
THE MODEL DOCKYARD PTY. LTD.
 216-218 SWANSTON ST. MELBOURNE. PHONE: 663 3505

N GAUGE **A** USTRALIAN **K** IT



A VR "ELX" KIT IN HIGH IMPACT STYRENE
 INJECTION MOULDED FOR EXCELLENT DETAIL.
 KIT INCLUDES VR TRANSFERS, AVAILABLE WITH OR WITHOUT BOGIES

ASK YOUR HOBBY SHOP

SEE HOBBYCRAFT
 1351 Burke Road
 East Kew 3102

OR Direct from FYBREN MODELS P.O. BOX 88 IVANHOE 3079 Trade enquiries welcome



Keep up to date with the Hobby
Write for **CATALOGUES** post paid.

ARNOLD — N	\$3.75
FLEISCHMANN —HO & N 1980/81	3.00
HAG — HO Swiss Prototype	.80
HAMO - HO 2 Rail DC	.28
KIBRI Kits	1.50
LOCOMOTION Controllers, etc.	.50
MARKLIN —HO, Z, No. 1. 1980/81	3.00
MANTUA — HO USA Prototype	1.40
PECO — HO & N Combined 1980	3.75
RIVAROSSI — N.S.W.	8.90
— Interstate	10.20
SEUTHE Smoke Generators etc.	.28
TROLLER & EDA Controllers	.50
WIKING — HO & N Road Vehicles	.70
VOLLMER Kits	2.50

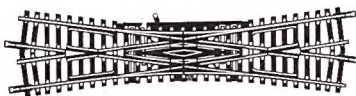
FLEISCHMANN

1980 New Releases now in stock:—

HO.No.5165, 5199, 5208, 5218, 5224
5351, 5388, 5693, 5694, 5695.

N.No.8165, 8199, 8202, 8224, 8350
8693, 8694, 8695.

Soon to arrive from FLEISCHMANN . . .
ALL METAL BODY 0-6-0 Tank Loco in
HO No.4020 \$83.10.
N gauge 4-6-4 Tank Loco No. 7078
for \$90.40



Fleischmann's Brilliant New Double Slip
point No. 6665 in Code 100 Nickel Silver
Track FEATURING

- 1) One motor drive,
 - 2) Electrically separated crossing tracks
- OR . . .
- 3) All tracks live as desired.

With this point it is possible to cross your complete point network using only one electric circuit.

Price	Manual	\$25.95
	Electric	\$32.95

ORDER NOW and secure yours from the First shipment.



Don't forget Fleischmann's UNIQUE high speed "FLOATING FROG" Point 6648 — as the Blade changes, so does the FROG — gives continuous rail through the point — no more Guard Rails. Price . . Manual Nickel Silver . . Just \$12.95.

MARKLIN

MAKE TRACKS TO BILL for MARKLIN

**JUST ARRIVED –
The 1980/81 CATALOGUE**

Send \$3.00 for your Copy.

And remember we stock:—

- 1) Locomotion Solid State Controllers for Marklin 3 Rail system. Features: Brake & Inertia for absolute realism ... **ONLY \$68.00**
- 2) KOLL's Price Katalog for Marklin Collectors — 264 pages (some illustrations) covering all HO models ever made ... **JUST \$24.65 posted.**
- 3) Marklin Starter-Set for XMAS — **ONLY \$60.00** plus postage — N.S.W. \$1.60 & Interstate \$3.30.
- 4) Contact us for your No. 1 and Z Gauge requirements.
- 5) If MARKLIN make it — we can supply it.

MAGAZINES

Subscriptions taken for Quarterly
Magazines:—

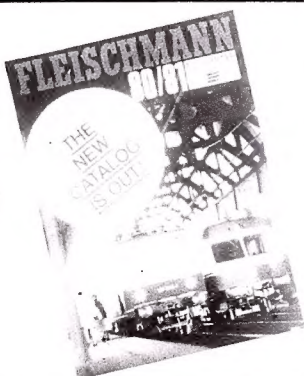
- a) Fleischmann Kurier (German)
b) Marklin Magazine (German)
c) Continental Modeller (English)
EACH \$10.00 per year post paid.

SALOTA

MULTI-TRAIN CONTROL
for . . . HO, O, N, No. 1 (LGB)

Tired of waiting for the others! !!!!!!!
(Zero 1, Airfix etc.) then buy the
PROVEN, TRIED and TESTED system
from West Germany. We have demon-
strated this system — **WITHOUT FAULT**
— at all the Major East Coast Model Rail-
way Exhibitions over the past 12 months,
and remember **SALOTA** has been sold on
World Markets for 3 years. It is reliable
and guaranteed and enables you to run 5
trains Simultaneously & Independently
on one track at the same time with just
2 WIRES TO TRACK.

Don't wait any longer — send 50c today for details.



**JUST ARRIVED 1980/81
CATALOGUE — 87 pages in full colour
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COBURG, 3058
VICTORIA

MAIL ORDER SPECIALISTS

TELEPHONE (03) 478 0038

WHAT'S NEW? WHAT'S NEW? WHAT'S NEW? WHAT'S NEW? WHAT'S

The second most asked question we hear while standing expectantly behind our, you beaut, all electronic cash register is — WHAT'S NEW? Most of the items listed below are new — to our shelves at least. We hope some of them will be of interest to you. We are especially happy to offer the new Australian items. (The most asked question? — Yes its very nice, but have you got it in . . . ?)

WHATS NEW?

From EVERGREEN SCALE MODELS

Part No 204 is their HO Stairway Kit. The kit contains enough slotted stringers and pre-cut treads to make 22 inches of stairway. \$2.10

WHATS NEW — ON THE AUSTRALIAN SCENE?

From WEICO MODELS in N Scale we have a kit for a VR AS Class Passenger Coach as used on the "Spirit of Progress". Kit includes everything EXCEPT Decals, Couplers, Paint and Glue. The body is photoetched aluminium, folded to shape and painted VR blue. The underframe, coach ends, diaphragms and bogies are unpainted metal castings. PECO N scale wheels are also included.

Price per kit \$13.45

MnJ Decal to suit is No 020 \$1.00

Matching paint is Humbrol Midnight Blue.

Price per Tinlet 69c

In preparation is the Dining Car.

From TRAX AUSTRALIAN PROTOTYPE MODELS comes news of a series of HO NSW prototype, injection moulded, plastic kits. First offering is the LCH coal hopper at \$5.95 each. Planned releases include a TRC at \$7.95, RU at \$5.95, S at \$5.25, CW and BCW, price unknown. At the time we are preparing this ad exact release order and delivery dates are not known — nor do we know if parts will be available separately. North Yard 10.5mm spoked wheels are suitable for use with these kits and are 70c per axle. MnJ Decals:— Set No 2303 contains lettering for LCH, Set No 2306 for the TRC, Set No 2301 for the CW, BCW. All MnJ Decals are \$1.00 a set and are available from McBEES.

From BROAD GAUGE BODIES . . .

Comes news of a series of SAR Epoxy Kits. First car off the rank is the SAR (or ANR) M Class Box Car at \$5.95. Decals, bogies and couplers are not supplied. (Suggested:— Archbar or, in Pass. service, Bettendorf). Write for full details of future releases.

From FRYBEN MODELS in N scale we have the VR ELX. (See review in Sept/Oct AMRM, page 43). The ELX is available with bogies at \$6.95 or without bogies at \$5.00. Decals are included to letter for the VR. For modelers who prefer Kadee couplers we can supply Bettendorf or Roller Bearing bogies with Kadee couplers attached for \$3.95 a pair. Hows that? New Australian models from AUSTRALIAN manufacturers. The question now is — will Australian modellers support these new ventures? We hope you will — through McBEES, supplier of Model Railway Equipment Australia wide since 1974. PLEASE NOTE:— We have discontinued ALL the VR metal castings featured in our past advertising.

WHAT'S NEW?

From THE SCALE MODEL WEATHERING CO.

Scale Model Weathering Vol 1 a 30 page booklet packed with ideas and techniques for weathering any model \$5.00

Pack of Colour Photographs for Volume 1 \$4.00

Art of The Diorama Volume 2 a 52 page booklet full of information on the "how to" of Diorama construction. \$5.00

Pack of Colour Photographs for Volume 2. \$4.00

Both booklets are prepared by Mic Greenberg and Gary Nash.

WHAT'S NEW?

From EVERGREEN HILL DESIGN HO.

All EHD items are metal castings or photo-etched parts.

No.	Item	Qty	Price
601	Gas Pump	1	\$2.80
602	Push Broom	4	\$2.10
603	Straight Broom	4	\$2.10
605	Spade	4	\$2.10
606	Power Head/box	1	\$2.10
607	Canteen	5	\$2.10
608	Car Jack	4	\$2.45
609	Lube Cans	3	\$2.10
610	Kerosene Lanterns	5	\$2.45
612	Tool Set	1	\$2.80
613	2½ Gal Gas Can	4	\$2.45
615	Vice	3	\$2.10
616	Grinder	3	\$2.10
617	Smoke Jacket Tall	2	\$2.45
618	25 Gal Drum	5	\$2.10
619	Smoke Jacket Short	2	\$2.45
620	Switch Stand	1	\$2.45
621	Picks	6	\$2.45
622	Oxy Bottle	5	\$2.10
623	Oil Can w/handle	4	\$2.10
624	Act Bottle	5	\$2.10
625	Tyres	5	\$2.10
627	Long Peavy	4	\$2.10
628	Short Peavy	4	\$2.10
629	Axes & Mauls	4	\$2.10
630	Chain Saws	2	\$6.30
631	Motor Drive	1	\$2.10
632	Small Roller Bear's	4	\$2.10
633	Lge Roller Dearing's	4	\$2.10
634	Overhead Rolling Block & Tackle	1	\$3.50
636	Steam Buck Saw	1	\$4.90

As this is a new line some items may be in short supply. Most items are also available in O scale on an "import-to-order" basis.

WHAT'S NEW?

From PEMCO RAILWAY SYSTEM in HO.

Pemco is a new, Hong Kong based, model railway manufacturer. Listed below are items available as this ad is prepared.

2-6-0 Mogul with Tender Drive in PRR and Southern	\$46.95
F-9 Diesel in CP, CN and Ontario Northland	\$18.50
Alco 430 Diesel in Santa Fe and CP	\$20.95
SD-35 Diesel in UP and Ontario Northland	\$21.95
GG-1 Electric with operating pantograph in PRR Maroon or Green	\$35.95
50' Double Door Box Car in CP and CN	\$3.60
40' Tank Car, Single Dome in Hooker, Union	\$3.60
50' Reefer in GB&W	\$3.60
40' Stock Car in D&RGW	\$3.60
36' Caboose in Santa Fe, CP and CN	\$3.25
40' Hopper Car in D&RGW and CN	\$3.25
60' 3 Dome Tank Car in Dow Chemical, Gulf Oil	\$4.25
60' Reefer in NYC and CN	\$4.25

WALTHERS 40th EDITION O CATALOGUE

THE reference for O Scale the 40th edition contains hundreds of new items on 256 illustration packed pages (that's 56 more than the previous edition). With 43 new manufacturers, items of 172 Model Railroad manufacturers are listed. Price \$6.95 plus \$2.50 post and pack.

WALTHERS 1981 HO CATALOGUE

Due into stock during December, the 1981 Walther's Catalogue contains:— 16 pages of new colour photographs, 19 new manufacturing lines (for a total of 233 lines), 480 pages — the thickest yet, 6 page colour foldout featuring Instant Horizons background scenes and a 12 page, full colour introduction to the 3 Maerklin systems — Z, HO and No 1 Gauge. We will import to order any item in any of the Walther's Catalogues. Price of the 1981 HO Catalogue is \$7.95 plus \$2.00 post and packing.

BOOKS OLD AND NEW From KALMBACH

All About Signals	\$2.50
HO Primer	\$5.00
Track Planning for Realistic Operation	\$8.45
764 Helpful Hints for Model Railroaders	\$4.50
Bridges and Buildings for Model Railroads	\$4.50
Scenery for Model Railroads	\$5.00
N Scale Track Plans	\$3.50
Track Plans for Sectional Track	\$2.50
How to Wire	\$5.50
101 Track Plans	\$4.00
Small Railroads You Can Build	\$4.00
Easy-To-Build structures	\$5.00
HO Railroad that Grows	\$4.00
Practical Guide to Model Railroading	\$4.00
Easy-To-Build Freight Cars	\$3.50
N Scale Primer	\$5.50
Traction Guidebook	\$4.50
Practical Electronic Projects	\$5.50
Railroads You Can Model	\$5.00
How to Operate your Model Railroad	\$14.45
The Westinghouse Air Brake Story	\$3.00
Popular Model Railroads You Can Build	\$6.45
Railroad Station Plan Book	\$4.50
1928 Handy Railroad Atlas of the USA	\$5.45
Scratchbuilding and Kitbashing Model Railroad Stations	\$5.45
More Railroads You Can Model	\$6.00
The ABC's of Model Railroading	\$5.45
Creative Layout Design	\$12.45
Building Plastic Railroad Models	\$10.00
Modelling the Clinchfield in N Scale	\$5.00
How to Build Model Railroad Benchwork. NEW!	\$6.00
Our GM Scrapbook	\$11.45
The Second Diesel Spotters Guide	\$11.45
Diesel Spotters Guide Update — includes electrics	\$8.45
Model Railroad Cyclopedia Volume 2 — Diesels. NEW!	\$22.50

BOOKS FROM OTHER PUBLISHERS

for Union Pacific Fans:—
Union Pacific Railroad Freight Cars of The 1950's \$12.50
The Overland Route — Union Pacific Railroad. Over 80 pages of black and white photos of UP Steam and Diesel \$10.50
Two books coming soon from OVERLAND MODELS:— Centennials In Action by George R. Cockle 88 pages 8½ x 11 inches, 12 diagrams, complete roster of DDA40X, details of modifications, dimensional data, painting and lettering diagrams, 175 photos. Due late October '80 \$12.45
Union Pacific 1977-80 by George R. Cockle. A 208 page, soft cover, detailed review covering the UP's most dynamic diesel years. Order now — delivery expected January 1981. \$19.45

SCREWS, WASHERS, NUTS & BOLTS

Number in brackets is number per packet.
Price is \$1.75 per pack.

BRASS MACHINE SCREWS

(with flat ends)

Round Head 00-90 x 3/16" long	(20)
Round Head 0-80 x 3/16" long	(20)
Round Head 1-72 x 3/16" long	(20)
Round Head 2-56 x 3/16" long	(20)
Round Head 00-90 x 3/8" long	(12)
Round Head 0-80 x 3/8" long	(12)
Round Head 1-72 x 3/8" long	(12)
Round Head 2-56 x 3/8" long	(12)
Round Head 00-90 x 1/2" long	(10)
Round Head 0-80 x 1/2" long	(10)
Round Head 1-72 x 1/2" long	(10)
Round Head 2-56 x 1/2" long	(10)

All the above are also available with Flat Head and Hexagonal Head.

WOOD SCREWS (With pointed ends)

#0 x 3/8" Round Head	(36)
#1 x 3/8" Round Head	(36)

#1 x 3/8" Round Head	(36)
#1 x 1/2" Round Head	(36)
#2 x 3/8" Round Head	(36)
#2 x 1/2" Round Head	(36)

SELF TAPPING STEEL SHEET METAL SCREWS

#2 x 3/16" Pan Head	(36)
#2 x 1/4" Round Head	(36)

NYLON MACHINE SCREWS (Flat Ends)

1-72 x 1/4" Round Head	(12)
2-56 x 5/8" Round Head	(12)
4-40 x 3/4" Round Head	(12)
2-56 Nylon Hexagonal Nuts	(12)
4040 Nylon Hexagonal Nuts	(12)

BRASS WASHERS

For 00-90, 0-80, 1-72 and 2-56 (16)

BRASS NUTS (Hex)

For 00-90, 0-80, 1-72 and 2-56

(Each pack of nuts and washers contains only one size.)

TAPS for the above 4 sizes are available for \$1.65 each and suitable drills are available in packs of 2 for \$1.55.

SCREW STICKER Miniature figures to hold those tiny screws and parts while you start them in place \$4.15

KADEE HO COUPLERS

Each Pack of HO couplers contains enough to convert 2 wagons to the Kadee system.

No. 4 All metal coupler	\$3.95
No. 5 Universal coupler, for Athearn etc	\$3.35
No. 6 Long shank coupler	\$3.95
No. 7 Underset, long coupler	\$3.95
No. 8 Medium length shank coupler	\$3.95
No. 9 As for No. 5 but intended for bogie mounting applications	\$3.95
No. 711 3/4 size for "old time" equipment	\$3.95
No. 16 is the No. 6 coupler with the No. 7 draft gear box	\$3.95

(No. 16's are for use on vehicles with buffers)

KADEE HO UNCOUPLERS

No. 307 Electro-magnetic type	each \$10.30
No. 308 Under track type	each \$3.20
No. 321 Between rails type	pair \$4.45

HO COUPLER ACCESSORIES

205 Coupler Height Gauge	\$4.75
208 Truck Spacer Washer .015" thick	(24) \$1.20
209 Truck Spacer Washer .010" thick	(24) \$1.20
231 Greas-em powder lubricant	\$2.00
236 Speedi Loco Driver Cleaner	\$10.10
256 Roundhead Delrin Screws 2-56	(12) \$2.00

KADEE N SCALE

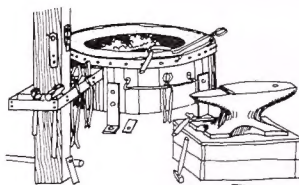
No. 1023 Couplers, assembled	2 pair \$4.30
No. 1055 N Standards Gauge	\$6.50

KADEE N SCALE TRUCKS

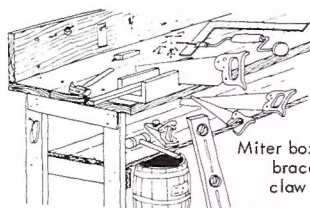
1000 Bettendorf with Kadee couplers	(pair) \$3.90
1001 Bettendorf without couplers	(pair) \$2.50
1007 Non-magnetic wheels 12 axles	\$4.25
1010 Archbar with Kadee couplers	(pair) \$3.90
1011 Archbar without couplers	(pair) \$2.50
1030 Roller Bearings with couplers	(pair) \$3.90
1310 Between rails Uncoupler	(2) \$3.55



Soft metal detail castings.



Large anvil, 4 types tongs, 5 different hammers.



CARPENTER TOOL SET
-5002
set(10 pcs)

Miter box, square, level, brace and bit, plane, claw hammer, mallet, 3 types saws.

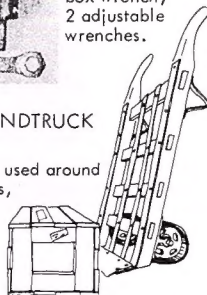


ROUNDHOUSE MECHANICS TOOL SET
-5003
set(10 pcs)

Large vise, hammer 5 open wrenches, box wrench, 2 adjustable wrenches.

WESTERN RR TYPE HANDTRUCK
5004 each

#4 size, heavy duty type used around freight houses, warehouses, for moving large crates, heavy supplies, etc.



DETAIL ASSOCIATES O SCALE

O Scale items are metal castings.

5001 Blacksmith Anvil and Tool Set	(10 pieces) \$5.25
5002 Carpenter Tool Set	(10 pieces) \$5.25
5003 Roundhouse Tool Set	(10 pieces) \$5.25
5004 Large Handtruck	(1) \$4.15
5005 Platform Scale	(1) \$4.15
5006 Machinists Tool Set	(10 pieces) \$4.75
5007 Blacksmith Hearth	(1) \$3.00
5008 Sacks	(4) \$3.75
5009 Lube Cans	(4) \$3.40
5010 Ground Throw	(2) \$4.15
5011 Caboose/Camp Car Set	(7 pieces) \$4.90
5012 C&S/RGS Brake Gear Set	(3 pieces) \$3.00
5013 Steam Loco Detail Set	(7 pieces) \$4.90
5014 Rerail Frogs	(3) \$2.25
5015 Screw Jacks	(3) \$2.25
5016 Water Bags	(3) \$2.25

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5063 Air Horn — F Unit	(2) \$2.80
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5069 Sunshades — F Unit	(2) \$2.25



MACHINISTS TOOL SET
5006 set(10 pcs)

Micrometer, 2 calipers, file, rasp, screwdriver, adjustable wrench, square, drill set, bench grinder.

If you have read this far down the column you must have some interest in O Scale. If you would like to be included on our list of O Scalars and receive news of new items as we add them to our expanding stock range — please write. If you could include some idea of your main areas of interest — narrow gauge, structure etc, it would help guide us in our choice of lines to stock. In a shipment due early January we are expecting, in On3, a Westside Lumber Co 24 foot Flat Car (expected price \$22.50) and a Four Door Block Car, plus a number of other On3 and HOOn3 kits. Also expected are Track Gauges, Small Tools, Decals for Denver and Rio Grande and Westside Lumber Co in HO. Under consideration is a range of Stub and Point type Turnouts in On3, Code 100, for introduction during 1981. (Would you believe On3 points with plastic sleepers "ready-to-run"?). Also on the way is a range of Prototype Plans and Prints relating to a number of narrow gauge roads. Full details will appear in our Newsletters and future advertising — or write!!!

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HOn3 HO O Scale

Dissatisfied with the price you pay for brass. Envious of the prices quoted by US discount outlets. Try us for real bargains in brass.

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We deal with all importers.

We can save you money.

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Westside	SP GS-5 4-8-4	\$550.00
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PFM	Michigan II 2 truck HO shay	\$425.00
Alco	SD 40-2 (Standard nose)	\$190.00
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Key	ATSF 3450 4-6-4	\$175.00
Key	UP Challenger 4-6-6-4	\$505.00
Key	UP Big Boy 4-8-8-4	\$620.00

Athearn Trainmasters \$25.00

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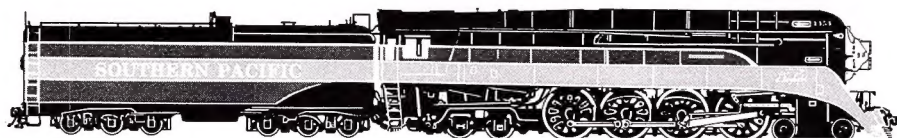


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The first Model Railway Kits made by RATIO were introduced nearly 30 years ago. These original coach and wagon kits were made of plywood with the roofs accurately machined from close grained timber. A different story from to-day as all Ratio Kits are now made from plastic with, in some cases, metal components. All kits are made to exact scale, wherever possible and practicable and supplied complete with HO/00 gauge wheels. Only simple tools are needed for constructing these authentic models. All Ratio Kits are made from the finest plastic materials available with all the necessary and delicate finescale detail included in the mouldings to produce a first class model. A full and comprehensive instruction sheet is included for easy assembly, and only glue and paint are required to complete. New Rolling Stock items are being supplied with waterslide transfers.

New...
available soon

TWO WAGON KIT PACKS

Two different wagons with brass buffers & brass wheel bearings can be made up from each pack. The kits are provided with separate side frames for modelling early or later types along with new wheels, a full set of transfers and an informative instruction booklet.

751 1-plank Wagon & Drop Side Ballast Wagon	\$12.75
752 LMS Open Wagons - 4-plank & 2-plank	\$12.75
753 LMS Coal Traffic & Loco Coal Wagons	\$12.75

N GAUGE

260 HOME & DISTANT SIGNAL	\$1.60
250 REMOTE CONTROL KIT FOR SAME	\$3.75

FOR FULL LISTING OF RATIO LINES AVAILABLE SEE AMC LIST SERIES "W"

L.M.S. COACHES

These are all plastic kits that contain finescale detailing to the sides, such as full panelling to the correct depth, bolt-connection mouldings, door handles, stops & hinges, grab irons, roof with lamp tops & vents, ends, floors, solebars, underframes, gas cylinder/s, brake gear, buffers, vacuum pipes, Hansell wheels, glazing & Triang type couplers.

NOTE: For modellers who wish to construct their own type of coach, all the mouldings are available separately. (See AMC list series 'N')

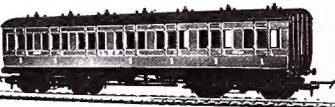
L.M.S. ex-MIDLAND RAILWAY 48ft. CLAYTON NON-CORRIDOR EXPRESS CLERESTORY STOCK	
5720 A11 3rd, 6 compartment, Lavatory, Luggage	\$9.95
5722 Composite, 3 1st, 3 3rd, Lavatory	\$9.95
5723 Brake 3rd, 4 compartment, Lavatory, Guard	\$9.95

L.M.S. ex-MIDLAND BAIN SUBURBAN STOCK 48ft. LOW ROOF	
5710 A11 3rd, 8 compartment	\$9.95
5711 A11 1st, 7 compartment	\$9.95
5713 Brake Third, 6 compartment	\$9.95
5714 Brake Third, 4 compartment	\$9.95

L.M.S. (L.N.W.R.) 50ft. CORRIDOR ARC ROOF EXPRESS STOCK

These kits have the same specifications as those above except that brass buffers are supplied. These kits also include dummy corridor connections.

5730 A11 Third	\$15.95
5732 Composite	\$15.95
5733 Brake Composite	\$15.95
5734 Brake Third	\$15.95



*Retailers: The prices set out in this list are for the recommended price only and there is no obligation to comply with the recommendation.

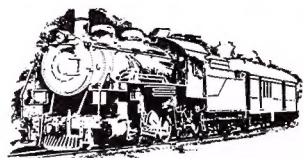
Passenger Cars
Ore Cars
Gondola

ROUNDHOUSE PRODUCTS

Overton Cars
Flat Cars
Box Cars

MODERN & OLD TIMER EQUIPMENT

From ROUNDHOUSE we have a wonderful array of North American equipment - locos, freight cars, passenger cars and some accessories.



ROUNDHOUSE LOCOMOTIVE KITS are an intelligent blend of plastic and metal parts resulting in the good appearance gained by using plastic mouldings for detail plus the weight needed for good traction gained by the use of metal castings for chassis and other parts. They are complete kits as they include driving wheels, chassis, motor, gears and X2F couplers. Most loco kits can be assembled in two or three evenings and assembly requires a minimum of tools - a small screwdriver and a couple of small files being all that is needed in most cases. In all but undecorated kits the bodies are fully painted and lettered in authentic liveries but some painting of chassis parts may be required.

ROUNDHOUSE PASSENGER & FREIGHT CAR KITS HAVE:-

- * Painted and lettered plastic bodies
- * Metal floors or weights for rail hugging ride
- * Ready-to-roll delrin bogies with RP25 wheels
- * X2F couplers & all necessary parts with no extras to buy (excepting 3-in-1 kits which may need extra parts for kit-bashing etc.)

FOR DETAILS OF THE ROUNDHOUSE RANGE ASK FOR AMC LISTS SERIES 'Q'

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B-6 Books, Magazines & Binders
E-4 Miscellaneous Electrical Lines
M-6 Merten = HO, O & N
Q-6 Roundhouse - HO, N & H0N3
R-7A Rivarossi - Regular USA, British & General Purpose Lines in HO & N
R-7B Rivarossi O & Continental Lines in HO & N
T-4 Tools, Aids to Construction & Raw Materials
V-5 Vollmer - HO & N
W-8 Ratio - HO, EM & N

RATIO
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ROUNDHOUSE PRODUCTS

INFORMATION LEAFLETS

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 - No. 2 Steam Motive Power Depots
 - No. 3 Station Buildings & Platforms
 - No. 4 The Goods Yard
 - No. 5 Using Peco Point Motors
 - No. 6 The Joining of Materials
 - No. 7 Motive Force - Electricity
 - No. 8 The Shopping Centre
 - No. 9 Some Hints on "Superquick"
 - No. 10 Simple Electric Wiring for Model Railways
 - No. 11 Points on Points - Double Slips
 - No. 12 Bridging the Gaps
 - No. 13 Basic Signalling
 - No. 14 Vollmer HO Catenary

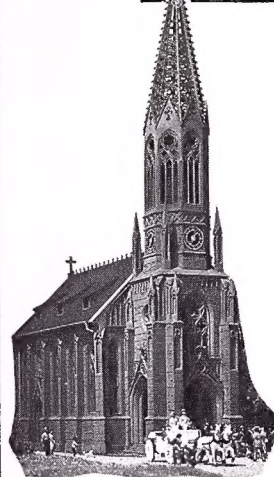
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ALSO "THE WONDERFUL WORLD OF A MODEL RAILWAY IN AUSTRALIA" 50c

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The Real McCoy

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THIS BEAUTIFUL CHURCH IS JUST ONE OF THE MANY EXCELLENT MODELS THAT ARE AVAILABLE FROM VOLLMER IN EITHER HO OR N GAUGE.

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THERE ARE NEW KITS AROUND THIS YEAR, AS IN EVERY YEAR, AND THE HIGH STYLING AND THE EASE WITH WHICH THE PARTS GO TOGETHER IS A JOY TO THE HEART OF THE RAILWAY MODELLER EVERYWHERE.

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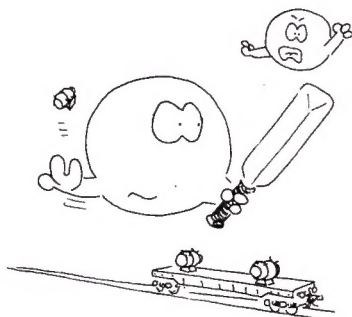
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ISSUES**

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No. 1 — April/May, 1963 (Reprint)

No. 39 — July/August, 1969

No. 41 — November/December, 1969

No. 44 — May/June, 1970

All the above are available at the price of 45¢ each, including post and packaging.

No. 74 — September/October, 1975

The above issue is available at the price of 60¢ each, including post and packaging.

No. 80 — September/October, 1976

The above issue is available at the price of 70¢ each, including post and packaging.

No. 82 — January/February, 1977

No. 83 — March/April, 1977

No. 84 — May/June, 1977

No. 85 — July/August, 1977

No. 86 — September/October, 1977

No. 87 — November/December, 1977

Issues 82 to 87 are available at the price of 90¢ a copy, including post and packaging.

No. 88 — January/February, 1978

No. 89 — March/April, 1978

No. 90 — May/June, 1978

No. 91 — July/August, 1978

No. 92 — September/October, 1978

No. 93 — November/December, 1978

No. 94 — January/February, 1979

No. 95 — March/April, 1979

No. 96 — May/June, 1979

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A.M.R.M.

NOVEMBER/DECEMBER, 1980

Issue 105, Vol 9, No 12

AT ISSN 0045-009X

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ADVERTISING DEADLINES: For all copy is as follows:—

January/February 1981	12.12.80
March/April 1981	18.2.81
May/June	17.4.81

BRITISH RAILWAY MODELLERS OF AUSTRALIA

An association for those who model the railways of Britain. For further information contact D. MITCHELL, 4 TOMPSON STREET, GARRAN, ACT 2605.

EXHIBITIONS

BOX HILL — Victoria. December 6, 7 at Box Hill High School Memorial Hall, Cnr White Horse & Middlesborough Roads, Box Hill. Open (Sat) 10am-9pm, (Sun) 10am-5pm. Admission \$1/50¢. Organised by the Mont Valley Modelling Group.

GEELONG — Victoria. January 23, 24, 25 & 26 at Waterside Workers Hall, Eastern Beach, Geelong. Open (Fri) 6pm-9pm, (Sat & Sun) 10am-9pm, (Mon) 10am-7pm. Admission \$1/50¢, family \$3. Organised by the Corio Model Railway Club.

MELBOURNE — Victoria. March 6 to 9, 1981 at Camberwell Civic Centre. Open Friday, Saturday 10.00-22.00, Sunday, Monday 10.00-20.00. Admission \$1.20/50¢. Organised by the Australian Model Railway Association, Victorian Branch.

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For the advantage of our regular advertisers, below is a list of the 1981 advertising deadlines.

January/February 1981	12.12.80
March/April 1981	18.2.81
May/June 1981	17.4.81
July/August 1981	19.6.81
September/October 1981	19.8.81
November/December 1981	16.10.81

ON THE COVER: Rail car 403 on a trial run on the NSW south coast line in 1979. G. Ball photograph.

CONTENTS

WOODEND — 2	Graham Ball and Jack Parker 13
STOCK WAGONS OF THE TGR	Ross Hurley and Tony Parnell 17
VR DIESELS IN 'N' SCALE — 2	Tony Scott 19
YOU WERE ASKING!	Leon Oberg 22
ROAD VEHICLES IN HO SCALE	Norm Chapple 24
A SPEED LIMIT DEVICE FOR LOCOMOTIVES	John S. Glastonbury 25
BUILDING A 442	David Allen 27
NSWGR 442 CLASS DIESEL ELECTRIC	Phil Collins 29
THE W CLASS WAGONS ON THE ANR'S CENTRAL REGION	Phil Curnow and Roger Johnson 35
THE Z29 BALDWIN 2-8-0	David Wilson 38
MURWILLUMBAH	Phil Flynn 40
AMRM NEWS	42
MAILBAG	43
REVIEWS	44
CUB CARS	Phil Clark 47

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COMMENT

Today, modellers of the Australian prototype are extremely fortunate to have such a large selection of models available. There are numerous manufacturers, albeit mostly small, and suppliers of these models which cater for a growing band of enthusiastic Australian modellers.

However, there is a problem that has arisen because of this great influx of models onto the market. It revolves around the fact that a modeller has only a limited budget in which to finance his model railway. The problem that confronts us is that we now have too many models available (of NSWGR content) at the same time which does not permit the full potential demand for the models to be fully appreciated.

There are so many kits and brass locomotives available that one does not have the required finance available at hand to purchase all of the desired 'goodies'. Most of the kits are limited in production and the time taken between release of the model and its cessation of production is relatively short.

The position that confronts us might seem to be greatly appealing, especially to those who

can afford it, but missing out on some item of rolling stock or locomotive simply because the finances have been emptied from other previous purchases is not good news. It is not good for the modeller, nor is it of great benefit to the manufacturer since he is losing potential sales. Where there is a purchase of considerable cost, as is the case with buying brass locomotives, the budget is very quickly reduced and other models desired by the modeller may well remain on the shelf.

We are well and truly past the stages of the 1960s and early 1970s where models were rather scarce and crude in appearance. There is such a vast array of locomotives and rolling stock on the market at present that some type of rationalisation of the industry is necessary to help plan and further develop production in the future so that all models may be able to be purchased by the modeller.

A manufacturers' association should be established. Such a body could assist modellers to buy all the items they want within a reasonable time span. Standards could be discussed and adopted, especially in regard to quality control. Such a body could discuss the

merits of venturing into non-NSWR model production and an establishment of scale preferences for narrow gauge and broad gauge railways (i.e. HOn3½, Sn3½, EM, etc.) could be evaluated. The chances of duplication of models by different producers would also be negated by an association.

Further, there are many examples of a small modelling concern being unable to cope by themselves in production, packaging, selling, distribution, and associated duties. A manufacturers' association could help in this respect, even if it was only in an advisory capacity.

The May 1980 editorial in 'Model Railway Constructor' reveals many problems a small manufacturer must cope with if it is to remain viable. Although it does not suggest an association to be formed to assist the small manufacturer, it does offer the idea of running the manufacturing concern along business principles. An association could provide the avenue for such principles to be promulgated amongst manufacturers.

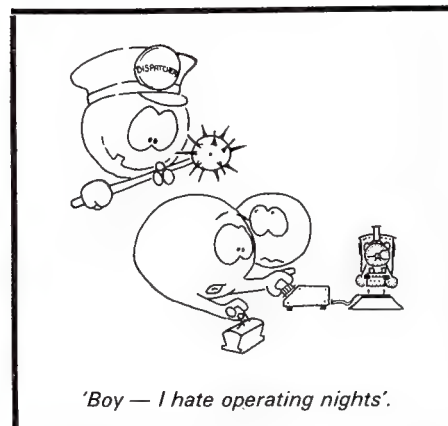
The modelling community must indicate their support for such an organisation or equivalent so that the Australian model railway hobby will grow and expand for the betterment of all.

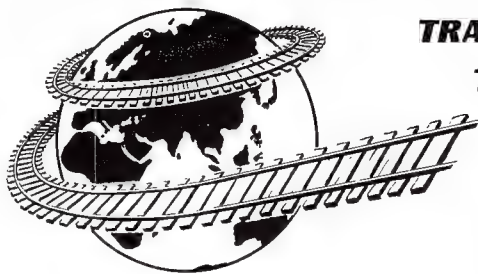
The onus is on you.

Brad Hinton



Eddie Garde does it again with a near enough 80 class, built from a Joueff model plus a few bits and pieces. Eddie has offered to write an article on the modification if there is sufficient interest so we hereby warn Eddie to start writing or drawing.





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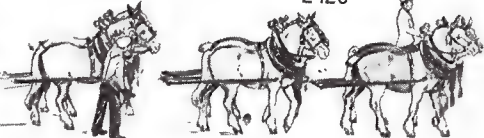


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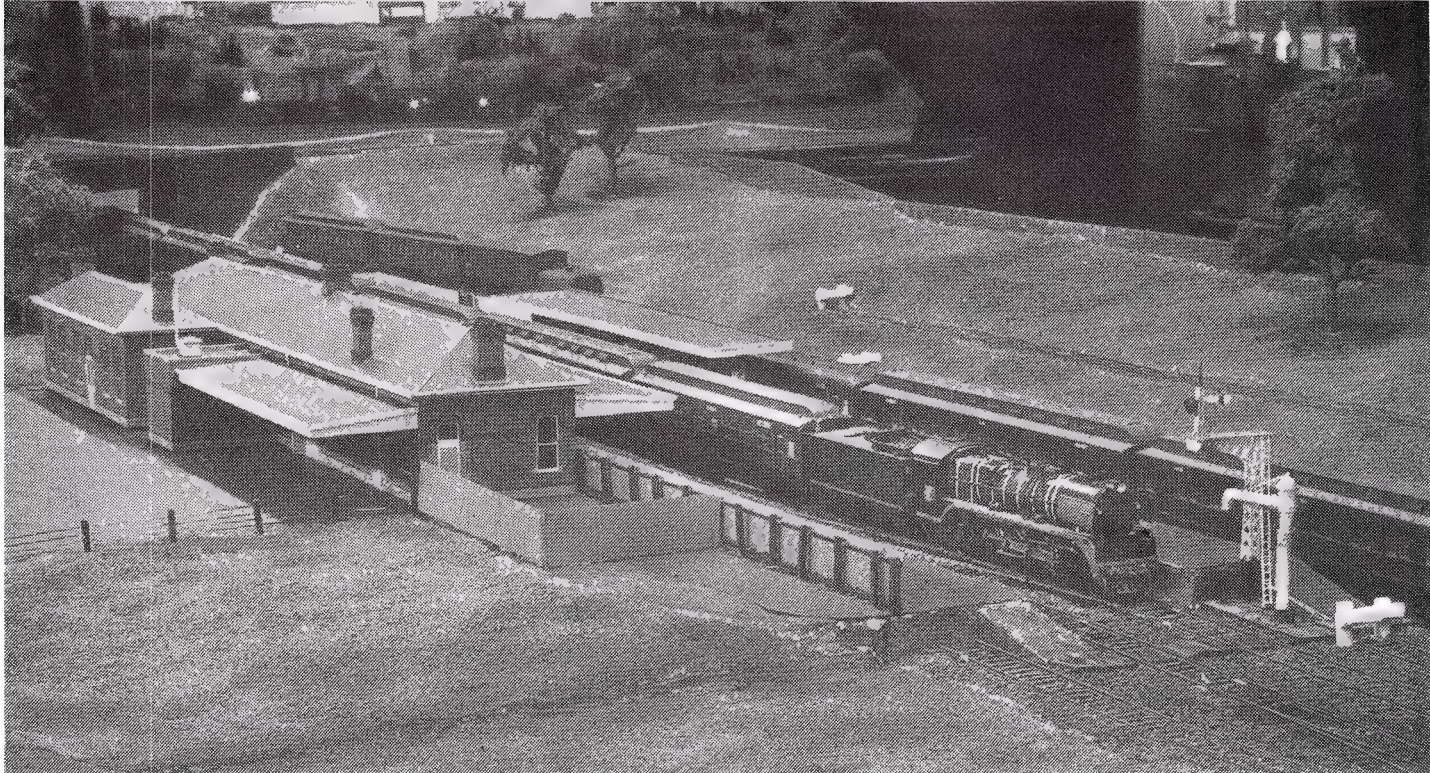
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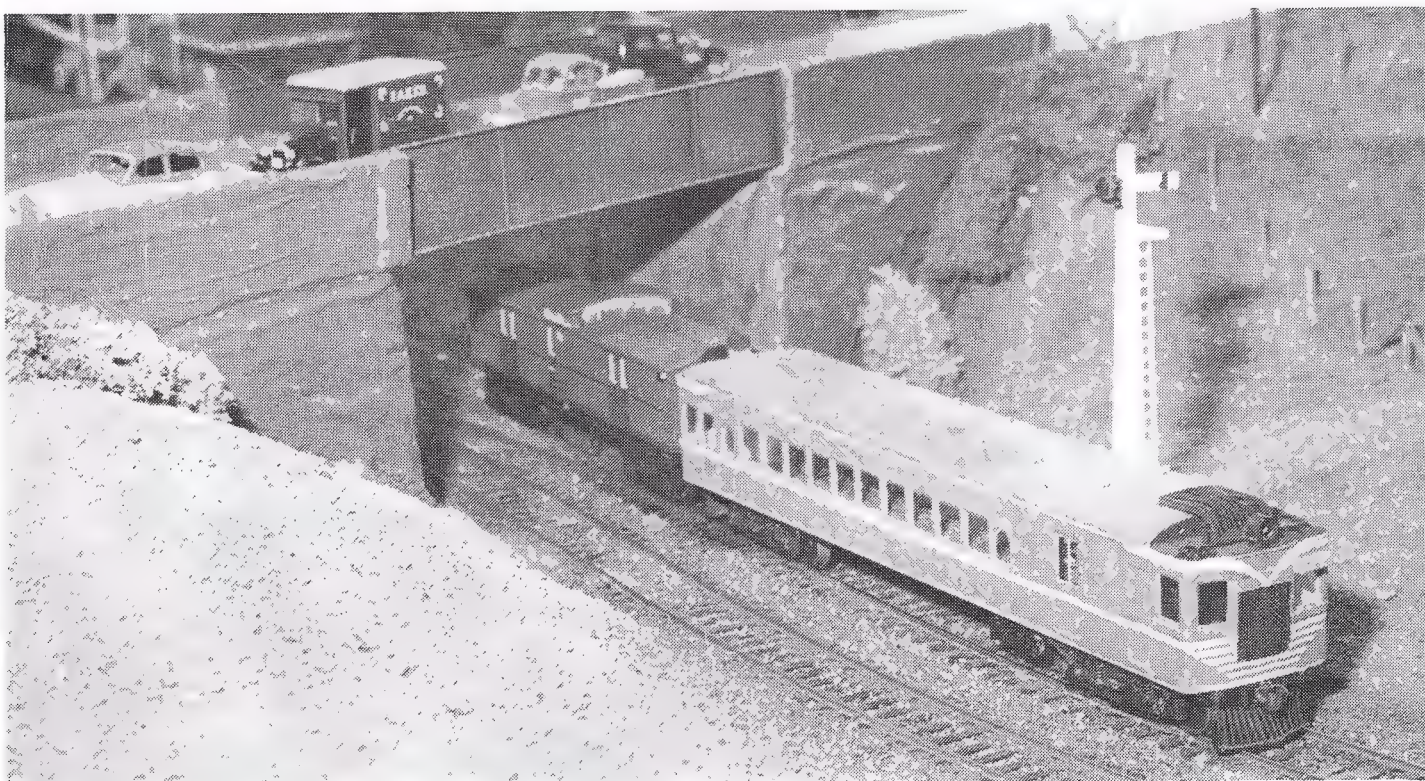
*R704 slows to a halt at Woodend with the evening passenger, bound for Bendigo.
The locomotive is a Model Dockyard import. Peter Gibbs photo.*

WOODEND Part 2

The following photographs further illustrate the acclaimed exhibition HO scale layout **WOODEND**. As built by Graeme Brown, this model of a Victorian Railways Station is representative of rural Victoria in the Steam era. For a description and trackplan of the layout refer to **WOODEND — 1**, published in the September/October 1980 issue of the **Australian MODEL RAILWAY Magazine**.

Photographs by Graham Ball & Jack Parker, unless otherwise indicated.

A DERM rail motor towing a 'C' van in place of a trailer leaves Woodend for Melbourne. The model of the DERM was built from perspex and styrene by Peter Jenkinson, who used a Lima motor bogie to power the unit.





Left: The striped vehicle at the end of the platform is a model of a VR Dodge railcar used for inspection work as well as Mail and passenger conveyance on lightly trafficked branch-lines from the late 1930's to the early 1950's. The model is actually a 1935 Ford kit from the USA and is in service pending scratchbuilding of a powered model.

Above: Y111 hauls a mixed goods out of Woodend. Note the white paint on the side of the rails (hidden from view of the public) which indicates the exact position of the under-track uncoupling magnets.

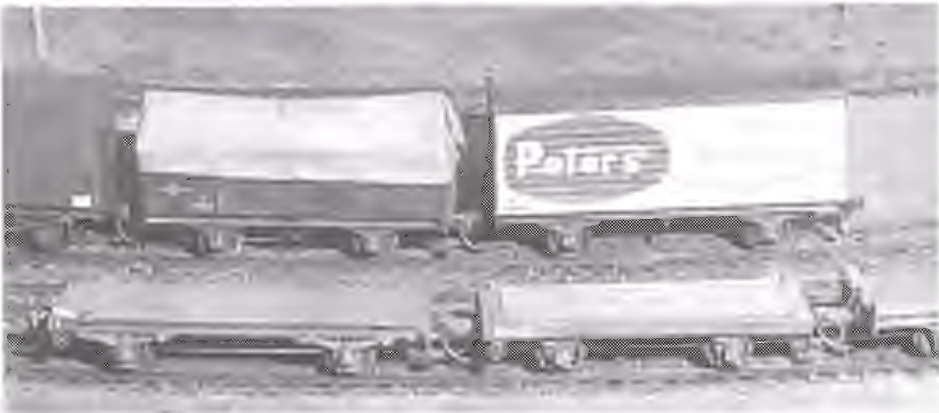
Below and Below Right: Are two views of Ken Fishley's K class locomotive. K174 sits on the turntable at Woodend awaiting re-assignment. The turntable is modified from a Scale Structures 70ft table and it is driven with a Con-Cor drive unit.





Above: Graeme Brown used styrene sheet to build the water tanks, which are awaiting to be re-filled before being sent up-country.

Right: Assorted VR goods stock in Woodend yard. Container flats were built by Bob Gallagher (see article July/August 1980 AMRM), while the Peters' U van was built and painted by Bob Dunn.

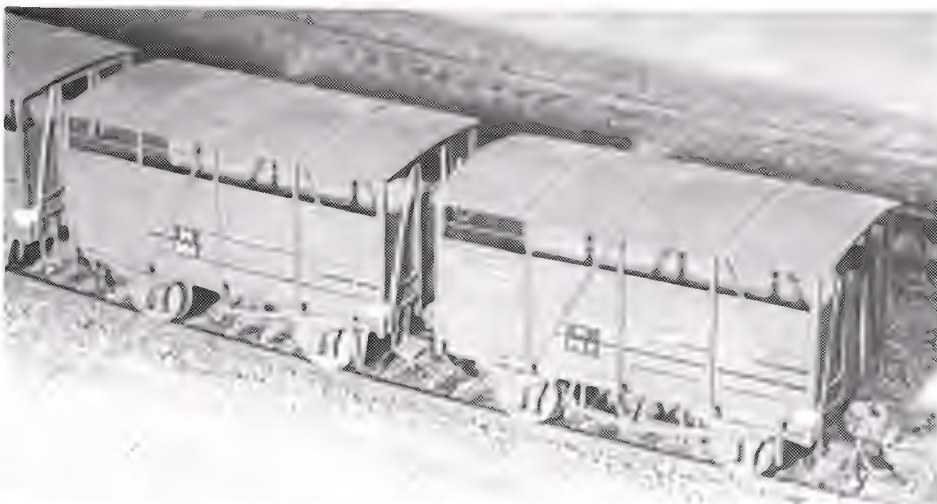


Below A 'B C E' second class guard's van parked in the down siding at Woodend. The coach was built from NorthEastern strip wood by Peter Eisenhut.



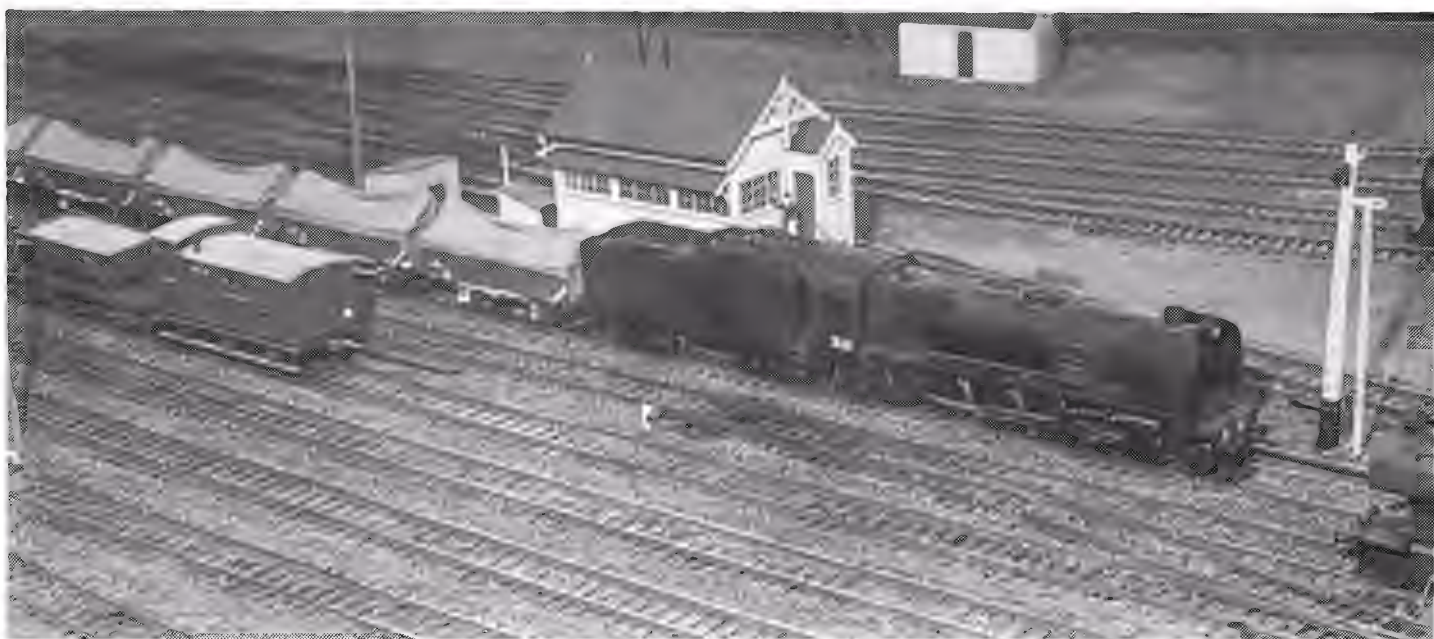


Above: B61 slows to a halt at Woodend with an Up passenger. The locomotive (now withdrawn from traffic) was built by Graeme Brown from Rivarossi E8's on an Atlas chassis, back in the days when Rivarossi were relatively cheap to purchase.



Left: Part of a rake of VR four wheel cattle trucks built by Graeme Brown. The body was built completely from styrene sheet including the angle iron which was built up from strips cut from 0.010" sheet.

Below: X class Mikado No.41 and C class Consolidation stop at Woodend to change crews. The X class was built by Bob Dunn while the C was built by Kel Heath. The forty-two wheat wagons behind the X class were built from styrene with Alfoil tarps (as described in Jan/Feb 1980 AMRM) by Graeme Brown.



STOCK WAGONS OF THE TGR

Part 1

- Article prepared by
- Information supplied by
- Photos
- Draughtsman

Ross Hurley
Tony Parnell, Allan Willox
Tony Parnell unless noted
Tony Parnell

The H Class Four Wheel Cattle Wagon

The H Class wagon is a 14'0" (4260mm) by 7'9" (2360mm) covered van used for carrying cattle. On introduction they were rated as a seven ton capacity vehicle, but this was reduced to six tons in 1949. They were first introduced to the Tasmanian Government Railways in 1885 and continued to be added to the system until 21/11/68, when they reached a total of 171 units.

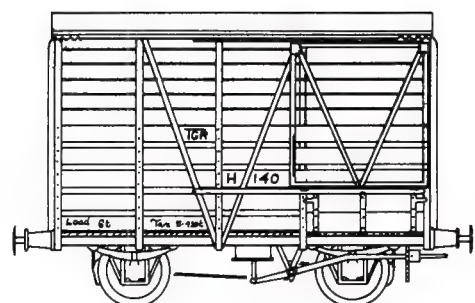
They were built, in the early years, on imported steel underframes, and the first four units cost £146 to build. As built, the timber bodied H Class had a 4' - 2" doorway diagonally opposite on each side, with two 2' - 1" swing doors in the top section, and a low drop door at the bottom. In later years some units were built with a sliding top door, and some older units were rebuilt with the same.

Unfortunately there are large gaps in the records on this class and some data is missing; however it seems all were fitted with eye-bolts and removable flaps for the carriage of three horses (see AMRM Jan/Feb 78). The wagons were also used to carry superphosphate in the off season. Some units were built with an open (or no) roof, and H5 was converted for circus train use.

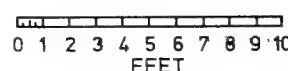
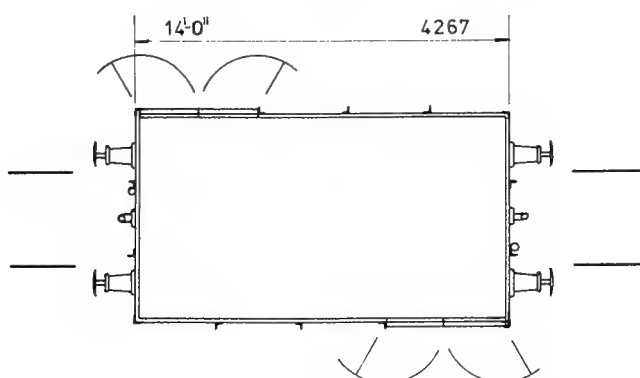
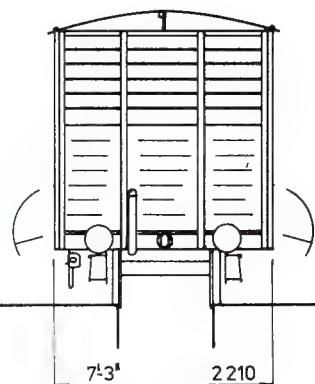
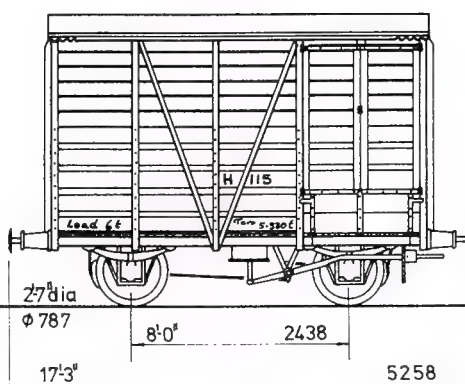
Some vehicles were allotted for use on specific lines. Wagon Lists show six were charged to Chudleigh, five to Brighton, two to Strahan-Zeehan, and four to Sorell, but some

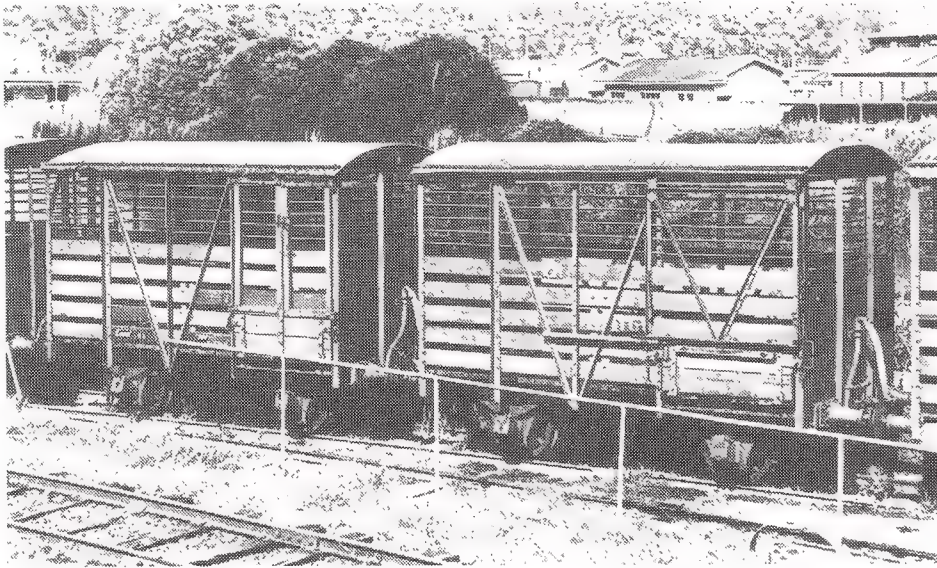


TGR H 34. Photo by courtesy Tasmanian Government Railways (now Tasmanian Region, A.N.R.)



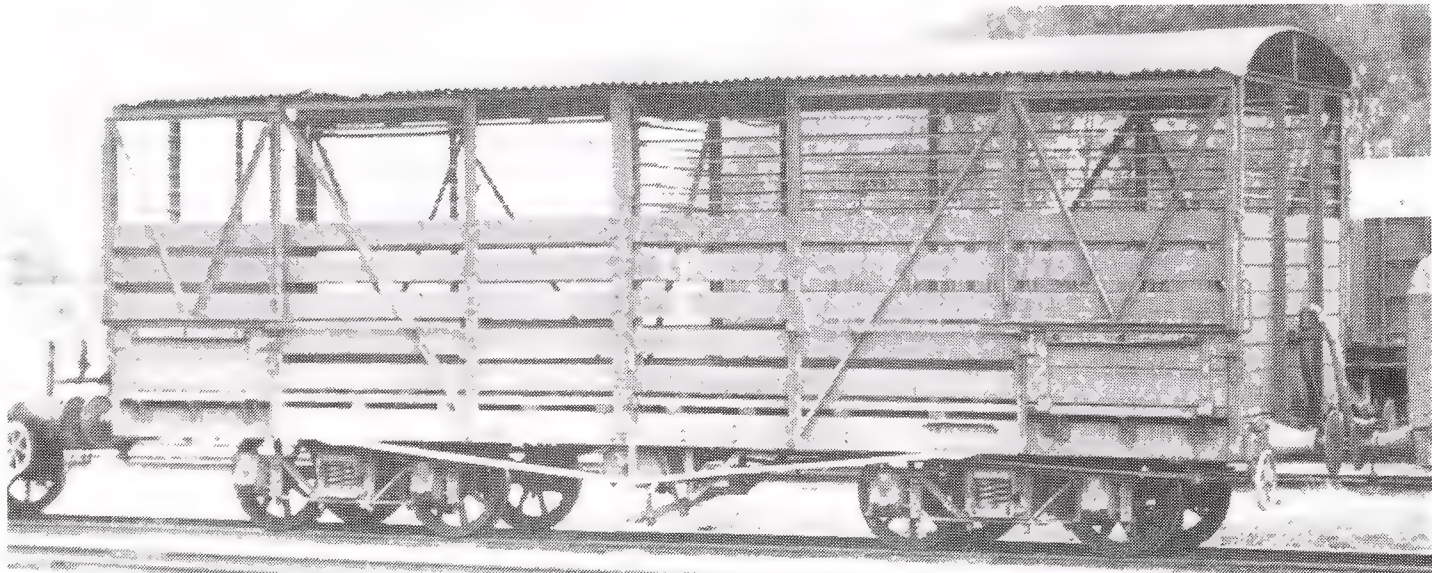
alternative door style





TGR H119 and H168. Note that H119 is equipped with hinged doors while H168 has a sliding side door.

Below: HA 15 showing doors at outer end of each side.



of these may never have reached their specific lines. The Sorell line is known to have closed in 1926. The cost of building these vehicles was charged to the cost of each respective line.

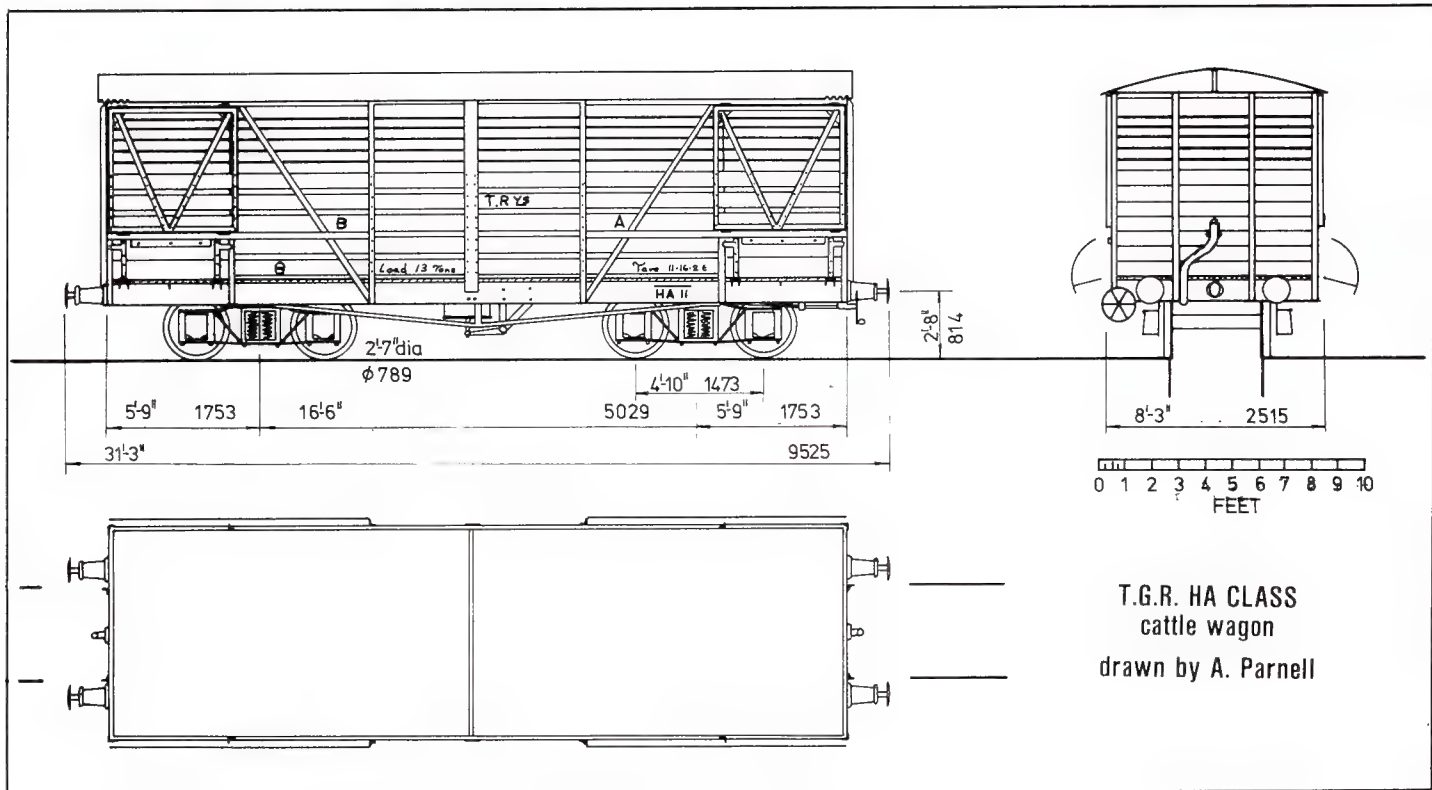
From 1913 onwards, all vehicles were built with the roof raised 15 inches, and during the period 1917-1931 all old vehicles were rebuilt with the higher roof.

When the vacuum brake came into use on the TGR, all H wagons were fitted with through pipes. Later, vacuum cylinders were fitted to wagons as they were built, and most older wagons were fitted when rebuilt, or as convenient.

In 1959 a further demand for cattle wagons saw a conversion programme commence in Launceston Workshops when H 112 to H 171 were built, on old underframes, mostly from A Class open wagons. The conversions finished in November 1968. Some units were built with hinged doors and others with a 4' - 4½" door openings and a sliding top door. The photograph and drawings show the two door styles.

Most write-offs occurred in the 1960's and early 1970's. As at 30/6/76, forty-four units were still in service.

cont. p. 26



V.R. DIESELS IN N SCALE

The first part of this article (AMRM Sept/Oct 80) gave the general introduction to building N scale diesels. In this issue Tony Scott describes how to build several V.R. diesels.

Y CLASS

Again the basic model for this is the Minitrix Fairbanks Morse Switcher, although you can see from the table below that the dimensions are not quite as close for the Y as they were for the T class. However, in the absence of any other commercial item more suited for the job, the Minitrix loco makes a quite acceptable Y class.

	Model	Prototype
Wheel spacing	15.1	16.2
Bogie spacing	42.2	38.2
Body length	79.6	77.6

As for the T, cut the top off the chassis to bring its height down to 14.6mm, and again file part of the cab end of the chassis down to a width of 8.4mm to accommodate the narrower part of the hood. Also file the bogie pivot pin down to 8.4mm long.

In order to model the air tanks between the bogies there is a fair amount of work involved. I didn't do this part when I first made the Y class, but because the air tanks are so distinctive I decided to have a go at it recently.

Take the plastic clip-on piece with the tanks on either side and remove the sides flush with the clips, then cut out a piece at front and rear as shown in Fig. 2. Make nicks in each clip arm about 3.5mm up from the base (Fig.3) and bend each arm inwards under very hot water so that the whole assembly will be held tightly against the brass rubbing plate. Cut the top off each arm about 1mm above the new nick.

Cut the brass rubbing plate and insulation material to the same width as the plastic piece. Also cut the corners off the section of chassis directly above this area to improve the look of the whole assembly. To complete this part of the loco make up two air tanks from 1/8" styrene tubing by filling the ends with Araldite and filing to shape when dry. They should be about 15.5mm long. File a small flat on each one and cement to the central plastic section. The brass conductor strips which are attached to the bogies and bear on the rubbing plate will probably have to be shortened a few millimetres to clear the tanks.

It's not all that necessary to remodel the bogies but in this case the operation is not too difficult, relatively speaking. Also, the bogies on the Y class are distinctive enough to warrant remodelling. First, remove all the outside brake blocks with associated gear, and the central hydraulic cylinders at the top of each bogie. Then, after a bit of judicious filing a new side member can be cut out of 0.010" styrene (see Fig. 4) and cemented onto each side of the bogies across the top of the axle boxes. Thin wedges of styrene can be inserted between this member and the lower one to represent the springs.

Now to the body. Carefully prise the roof off the cab and enlarge the side window and the windows facing along the hood. Then make your main saw cuts as shown in Fig. 5. After they have been made the body will be extremely delicate at points A on each side, so exercise great care with it.

Cut No.1 is rather difficult and should be made only if you intend to install the side rods (see below). It should be made inexact and

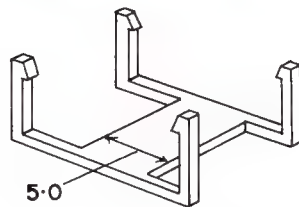
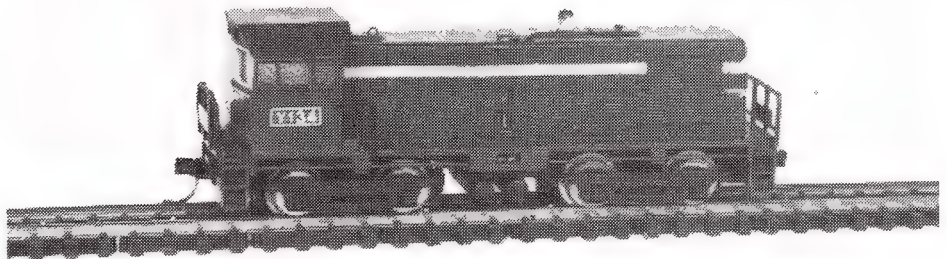


FIG 2

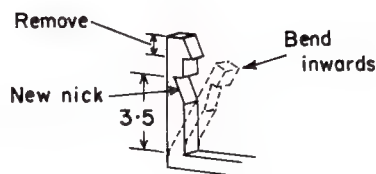


FIG 3

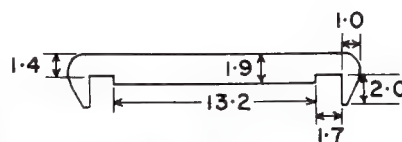


FIG 4

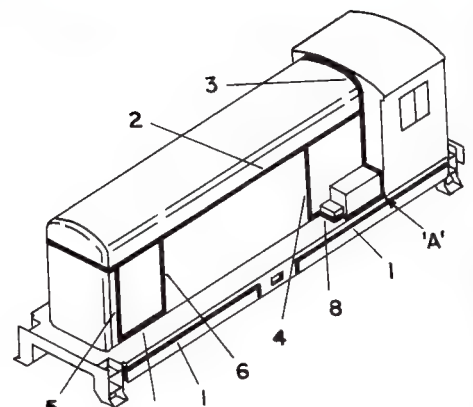
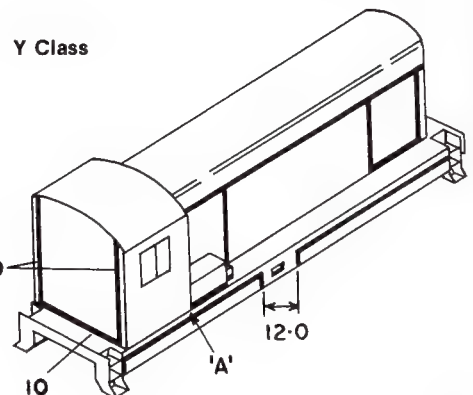


FIG 5



then filed down to the thickness of the footplate. Patch up the footplate and doors where the original cab steps were removed, and fabricate the new side panels of the hood out of 0.030" styrene. These cause the hood to narrow about 0.75mm on each side, and slope inwards in the interval 10.3 to 17.1mm in front of the cab. File the inner sides of the cab doors so that they are 10.5mm apart and attach the new side panels to the inside of these as shown in Fig. 6. Make a top for the hood and fit it inside the hood sides.

The cab end that contains the central door was made from the cab of the other Minitrix loco (used for the T class). The main windows are enlarged and the two small central windows over the door are cut out. The whole end is then bent in the usual manner by making saw cuts on the reverse side. The top part of the other cab end, over the hood, is made from 0.010" styrene and cemented on.

Again paint the cab first without the window glazing or roof in position — it's much easier this way!

The rods running the full length of the loco along the lower sides are a lot of trouble to install, and I put them on only when rebuilding the loco. But they do add a very authentic touch. If you don't want to tackle them leave this part of the body intact (i.e. do not make cut No.1). If you've decided to go the whole hog make the rods out of 15 amp fuse wire passed through holes drilled in small styrene blocks. In the middle of the body they are anchored with Araldite to the inside of the small panel containing the hole for the body retaining lug.

Finally add the detail — exhaust stack (3/32" styrene tubing), pipes (8 amp fuse wire) and filler cap (pin head) on the hood, and handrails, number boards and headlight lenses to the body.

The only obvious flaw in my model is the oversized vent on the sides of the hood near the front of the loco. I had already cemented the hood top in position before realising that half of the ventilator should have been replaced by panelling, and the other half should have been altered to a mesh grille, rather than a louvred vent as it is on the Minitrix model. However, I just couldn't bring myself to tear it apart for the third time.

X CLASS

My X class is a representative of one of the first group to be built (numbered X31 — X36) which has a fairly narrow grille at the front of the long hood. The model used is the Minitrix U-28 whose dimensions, compared with the prototype, are shown below;

	Model	Prototype
Wheel spacing	12.0 & 13.0	12.7
Bogie spacing	approx. 77	63.1

Thus the chassis must be shortened by about 14mm. The 1mm difference in the central to front wheel and central to rear wheel spacing on each bogie of the bought model is not noticeable. The U-28 seems to be the only narrow hooded Co-Co model available in N these days, as the Rivarossi SD-45 is now discontinued, I think.

Commence modifying the chassis by sawing or filing at the places shown in Figs. 7 and 8. The chief dimension to watch (apart from the length) is the height of the main part of the chassis — this should be 15.5mm. The top of the motor frame may need a little filing to bring it down to the same height. The cuts in the cabin area are made to accommodate the staff exchanger recesses. They must be made before joining the two parts of the chassis together again.

Cement the front and rear parts together

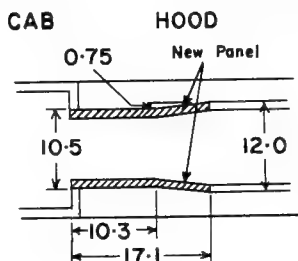


FIG 6

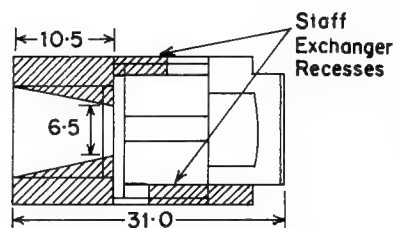


FIG 8

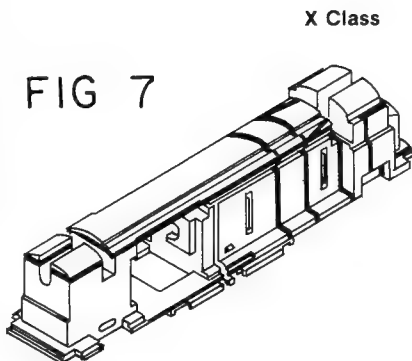


FIG 7

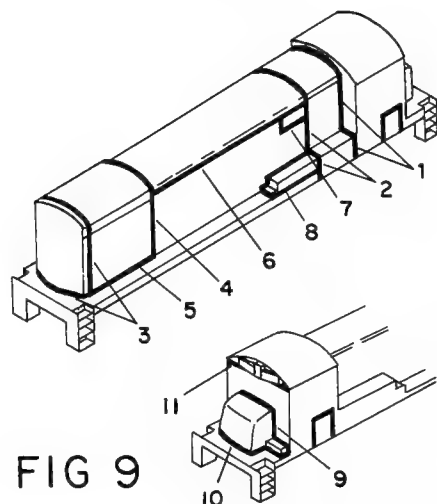


FIG 9

with Araldite. If there is no electrical conductivity across the joint, jam a short piece of wire into the driveshaft retaining clips on either side of the joints.

The long transmission shaft is shortened by first pushing the worm gear down the shaft and then filing or sawing off the excess shaft length. You will find that the worm gear is very tightly held on the shaft and you will probably need a thin metal pipe or other device that will fit over the shaft and allow you to hammer the gear down. You will need a hacksaw to cut the shaft.

The printed circuit board containing the brass rubbing plates must be shortened by the same amount as the chassis and a new piece of brass soldered to the cut off end for one of the current wipers from the bogie to bear on. The fuel tanks also must be shortened a similar amount and their shape altered to conform to the prototype.

Before cutting up the body, alter the four sets of steps first because there is quite a lot of filing involved and, therefore, a lot of handling of the body is necessary. The face of the steps can be filed back over their full height except at the bottom to leave that little toe which is characteristic of all V.R. diesel loco steps. Then straighten up the back and sides of the steps and cement a piece of 0.010" styrene to the back of each set so they are no longer open. As with the other models described already, the steps are narrower

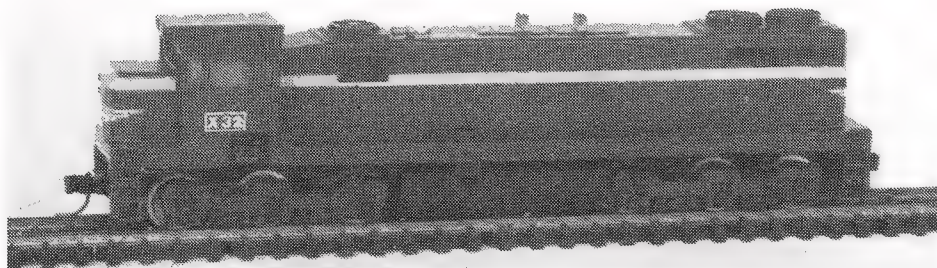
than those of the prototype, but not to worry!

All the pilot detail on the U-28 can then be removed leaving the simple square lines of the X class. Next, file all the hinge detail off the row of small doors beneath and in front of the cab so that the whole side is smooth. Then remove the cab roof and you are ready to make the saw cuts shown in Fig. 9.

Since the first cut removes the whole cab end from the rest of the body, spacers must be used between hood sides and cab sides for all further work. Be very gentle. Cut No.2 must leave EXACTLY the right length of body to fit the chassis — make absolutely sure it's in the right place. No. 3 is made to save the front panel with its lights and number boards. No's 4 and 5 get rid of unwanted detail and also allow the insertion of the front grilles, while No.6 brings the hood down to the right height (13.8mm above the footplate). No.7 is made to allow the fitting of the sloping vents for the dynamic brakes.

Commence rebuilding by filling the gaps in the footplate just ahead of the cab with 0.030" styrene. The two parts of the body can now be joined if they are the correct length. It is best to do this now as it is easier to fit the sloping side panels into the resulting gaps rather than make them first and try to get them flush with the other parts.

Make up the sloping dynamic brake vents and cement in position. Mine were made from the large vents and discarded panels of the



Minitrix Fairbanks Morse Switcher and are fitted with a surround of Microstrip. Fill in the fiddly gaps in the side panels above and behind these vents. Next, cut and fit the inward sloping side panels adjacent to the cab, remembering that they are set in from the main panels by about 0.5mm.

Now, at the other end of the loco make up new side panels containing the narrow mesh grilles, not forgetting that the forward part of the hood is raised about 0.5mm from the central point, and set in position. Clean up the front panel that was cut off the U-28 and trim to size so that the lights and number boards are at the correct height. Fill the outer ends of the number board slots with a little styrene, as they are too long and do not look right, and file the clear styrene inserts to fit them. Cement the front panel in place and then fit the three sections of the hood top inside, and flush with, the sides.

A new short hood is made from 0.030" styrene and cemented in place. The box-like recesses for the staff exchangers were made from 0.010" styrene because there's not much room to move there. The exchangers themselves were made from 0.010" styrene and a thin strand of wire.

Finally, the cab is reconstructed. Mine suffered some damage during all the previous work and various corner posts, etc., had to be carefully remade. The panel containing two windows situated above the long hood is a tricky piece of work to shape and get in place, especially if made from 0.010" sheet (so that window frames don't look too thick), but eventually it gets done. Use the original number board and light panel off the U-28 but fill in the light holes and shorten the number slots as before. Then carefully file off the lights from the clear plastic insert and check for size in the number board slots before attaching the assembly to the cab over the short hood end. Make the mansard roof out of 0.010" styrene as for the other diesels.

Some of the detail on top of the long hood needs describing, especially the three circular fan covers. (In actual fact I only made two, as the rear fan was obtained from an old Alco C636 body). These were made by cutting out a strip of 0.010" styrene, the length of which was the circumference of the fan, the width being its height. It was then bent to shape by wrapping around a pencil and holding under very hot water. The size of pencil or whatever may have to be varied in order that the ends of the strip just meet. Make two and cement them onto a panel of 0.010" styrene to fit the hood.

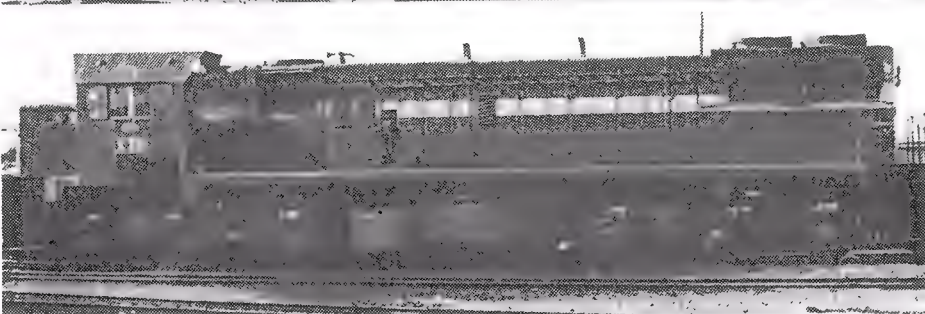
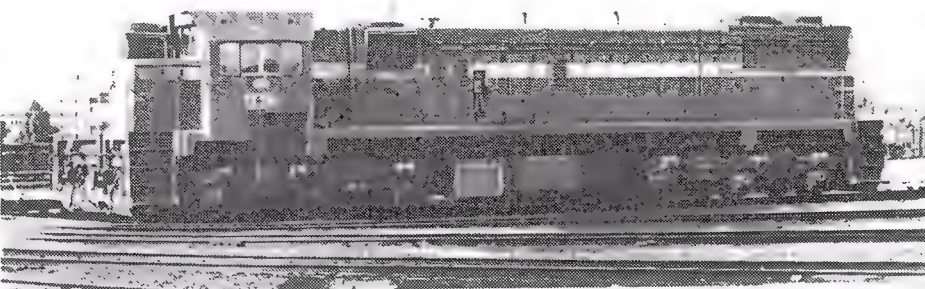
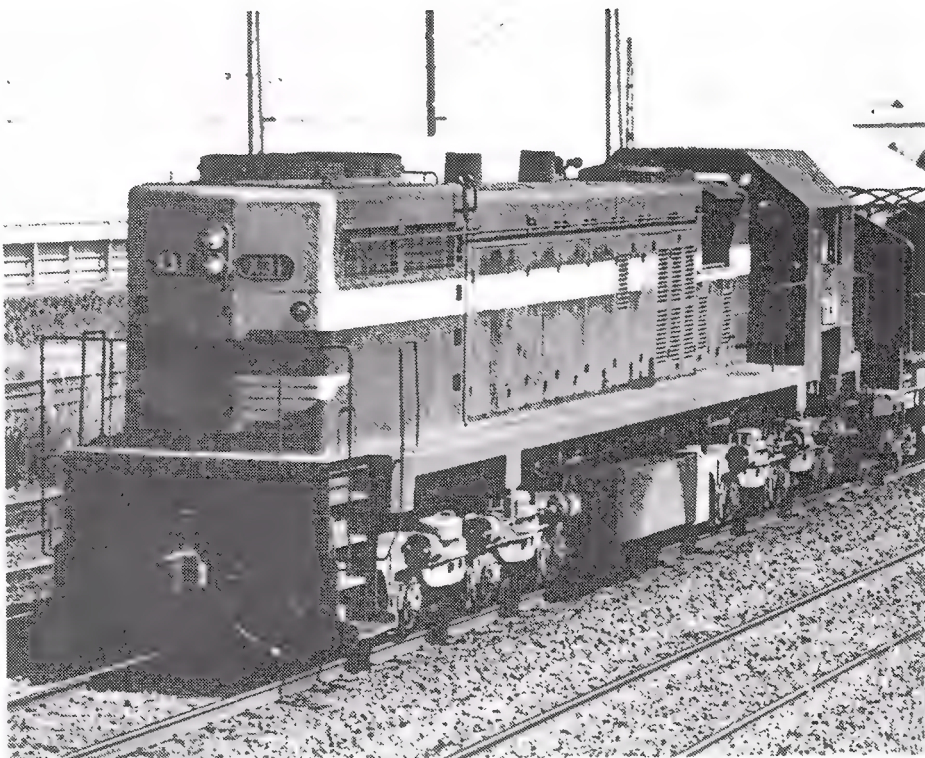
Next cut out circles of balsa that just fit snugly into the fan shrouds already formed, and round their tops. They will be rather rough but that doesn't matter as the next step is to cover them with some 80 mesh nylon stuck on with a small amount of Aquadhere or Araldite (not enough to fill in the holes in the mesh). Finally slide the balsa and nylon mesh assemblies into the shrouds and tuck in any stray pieces of mesh with a pin.

The exhausts were made from suitably shaped blocks of styrene and the three-chime horn off the U-28 can be re-used. Add number boards on the cab sides, handrails and headlights and number board inserts.

Well, that's all I've done so far, so I guess some rolling stock will have to be forthcoming soon to keep the locos company.

I hope this article will assist some of the newer modellers in what may be their first excursion into N scale construction, and that it may spur into action others who have reached the thinking-about-it stage. In fact I got the initial incentive to move from the armchair to the workbench by reading Terry

photo by Gavan Hughes



Clark's series of articles on the construction of NSW locos and rolling stock entitled "Australia N", which was published in AMRM between November, 74 and February, 78.

Terry stated in his first article that his main objective was to get people interested in N scale construction and that's exactly what he did. For that, many thanks Terry.



S CLASS

I haven't tackled an S class but it should be somewhat easier than the B class (refer part 1) since the No.2 end cab can be fashioned out of the E8 body without too much trouble, after shortening both body and chassis.

**PHOTOGRAPHICALLY
SPEAKING
CONDUCTED
by
Leon Oberg**



You were asking!

an additional lens I am wondering should it be fixed 200mm type, or a zoom around the 70-210mm range?"

I fully agree with Mark that one can easily tire of the standard 55mm (or 50mm) aspect, but must also point out that if every picture is taken with a 135mm, or a 200mm or again, a wide angle they will also tire the viewer.

Until recent years, practically all photographers took their pictures with "standard" lens views and it has only been due to the magnificent strides forward in single lens reflex photography over the last decade and a half that photography on a more advanced scale became within everyone's grasp. With today's multitude of lenses and attachments, no one should really tire of any picture-taking situation providing he or she has some additional "gear".

But to answer both these letters, I feel that it is BETTER to use fixed focal length lenses rather than zooms when the need is for the best possible result.

I have operated a number of zooms of various brands over the last seven years and have not liked any of them. Most of the ones I have used are very slow to operate (the zoom being on one control and the focus on another) and the ones in the (say) 80-250mm area are very heavy and cumbersome.

It must also be remembered that when using zooms over about 150mm, a tripod is

necessary for the best results. (To put it another way, I have achieved my best results above 150mm when using a tripod!)

Anyway, except for side-on across river or valley shots, or penetrating places hard to enter, most railway pictures look ugly and overly distorted much over 135mm or 150mm I feel. Whilst of course there are places a larger lens can be used, I think anyone buying their very first tele should consider a 135mm.

So, in answer, yes, it is better to build up an arsenal of fixed lenses where possible if excellent results are the need. If you must buy a zoom, try and obtain one which has both the focus and zoom controls on the one grip. And finally, before actually taking delivery of the lens, ask the shop-keeper to allow you to shoot a few trial pictures down the street and purchase it only after being satisfied with the results.

A reader also brought up the question of camera care.

Continued on page 24

Below This picture illustrates my point that extreme tele-lenses overly distort the subject and must be used with some degree of caution. Actually South Maitland Railways' No. 20 with an empty non-air coal train was shot with an 80-250mm zoom at about the 230mm region. In this distorted angle we lose all the boiler detail.



A. I. & S. DELIGHTS

The suggestion by a reader for a "readers' picture section" has already brought some response and in this issue I bring you a full page of interesting submitted pictures taken by two enthusiast staff members of the Australian Iron & Steel works at Port Kembla, N.S.W.

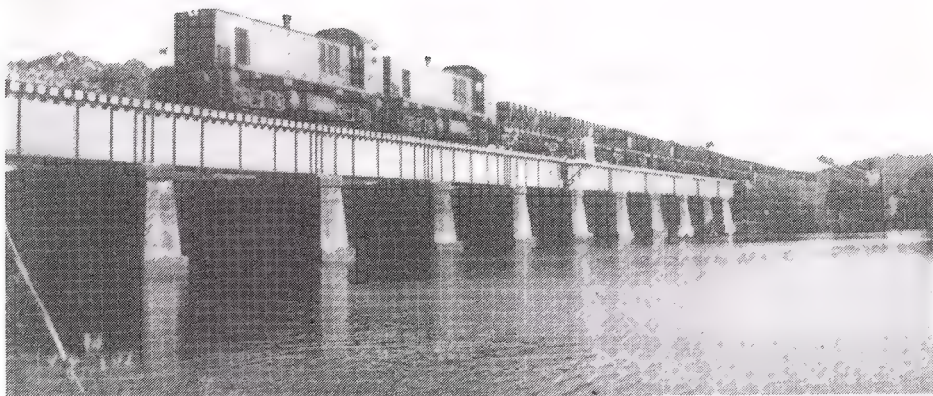
This works is not really a place where the average enthusiast can simply bowl up to at will and start shooting rail pictures, but for those who have been fortunate enough to have enjoyed an extended photography session "officially" on the plant, the experience holds many memories.

The company today operates 45 diesel-electric units of four distinct design types, three of which are seen here from the cameras of Don Drysdale and E. Kubacki and are printed from colour negatives.

Right D43 and D35, two 695 kw Bo-Bo units on loan to the PTC, rumble over Minamurra viaduct with a Bombo-bound empty ballast. (D. Drysdale.)

Below D23, one of thirteen chunky 282 kw EE shunting units in pristine condition following a recent general overhaul. (D. Drysdale.)

Centre Right D45, another 695 kw unit drags a rake of VR and PTC vehicles out of Unanderra exchange sidings. (E. Kubacki).



READERS PICTURE SPREAD



At Left Australian Iron & Steel's largest locomotive type to date, No. D34, a 1340 kW Co-Co which was acquired in May 1969 for heavy coal haulage is pictured arriving with empties at Wongawilli colliery in February 1979 immediately following a heavy overhaul and re-paint. (D. Drysdale).

Above D45 is again pictured, this time trundling through the lime-bin area of A.I. & S. Its QR marker lights are still featured on this March 1975 illustration. (E. Kubacki).



ROAD VEHICLES IN HO SCALE

Norm Chapple

It has been mentioned previously in the pages of this magazine the difficulty one has in obtaining (by fair means or foul) good quality, realistically priced road vehicles in HO scale, particularly if one is looking for vehicles suitable for Australian layouts. Wiking produce several cars, trucks, etc. that fit the bill as far as quality and suitability go but the cost (here in WA anyway) is prohibitive if a large number of vehicles is required. The same can be said about the Athearn range of prime movers and trailer units.

My layout, based on the (fairly) new standard gauge line passing through a typical Western Australian country town, requires a wide variety of vehicles to help bring it to life (hopefully). Not having unlimited finance to spend has led me into looking at different sources for my vehicles. Trucks predominate so far and it looks like the expensive Wiking, Eko (\$2.00 for a Ford Falcon in WA), Herpa, etc. cars will have to be bought as finances and needs dictate, as there is little in the way of cars available.

Here, then, is my collection so far —

Kit-O-Rama:

Tow truck; E type Jaguar sports with boat and trailer; Fork lift (Scale 1:90. K Mart had a whole series of road vehicles, space rockets, ships, railway equipment in various scales about 18 months ago — seem to be no longer available).

Matchbox:

Mercedes truck and trailer (pack TPI); Front end loader (No.29); Cattle truck (No.71); Semi trailer with pipe load (TP25); Tarpaulin covered semi trailer (TP23). The container semi trailer could also be used but the containers scale out at only 16ft. x 7ft. x 7ft. The prime movers are very useful. The cattle truck is useful for several conversions — cut off the two sides and back end of stock pen to make a flat tray truck — take off the complete stock pen (and use as per AMRM Nov./Dec., 79, page 22) and build up what you like onto it.

Corgi Juniors:

Front end loader (No.48); Ford (rubbish) container bin truck (No.54); Refuse truck (No.55); Road roller (No.67); Delivery trucks — Pepsi, Coca Cola, Ryder Truck Rentals, etc. Tip truck — looks like a Volvo (No.49).

Tomica:

Condor chemical fire engine — makes a good bushfire brigade unit — scale 1:90. Tomica has several cars, including a Rolls Royce, suitable for OO scale and several trucks suitable for TT scale (scale 1:78 and 1:120 respectively).

Fun Ho:

Bulldozer with blade — medium sized unit in HO.

Impy Major:

Flatbed semi trailer with pipe load (probably OO scale but looks good with HO scale vehicles).

Yatming:

Kenworth prime mover; semi trailer van (prime mover looks a little small).

Roco Mini-Tanks:

Van trailer; open trailer; tanker trailer. (All to HO scale).

Majorette:

Saviem truck and trailer (tarpaulin covered); Saviem Shell tanker truck; Saviem container truck (container scale 16' x 7' x 7'). These models are to a scale of 1:100 but look right for HO scale. Bus (scale 1:87) — looks very nice painted in Westrail's orange, blue and white colour scheme.

Don't overlook Tyco's cattle semi trailer and prime movers and Lima's various trucks and trailers and few cars in HO scale, either.

I hope this list will help other modellers facing the problem of where to get cheap road vehicles and will cause them to go out searching and hopefully discover and report via AMRM other vehicles that I have surely missed.

PHOTOGRAPHICALLY SPEAKING

Continued from page 22

Because railway enthusiasts' cameras are often being thrashed beside coal lines, perhaps iron-ore railways, or within dusty steel plants — or simply subjected to brake-shoe dust particles, it is quite fair to say that such equipment is given a harder life than many other hobby photographic indulgences.

Perhaps the first thing to say is NEVER, unless absolutely necessary, change lenses, or load film in such dusty coal, iron-ore or steel mill conditions. Dust will surely enter the camera and in time provide a number of operating problems. This statement is that much more important should film be changed under these conditions (and believe me, you see people do it all the time). The slightest particle of grit can lodge on the cassette felt, or the camera pressure plate and scratch the film throughout its full length.

Enough dust enters under normal operating conditions, so it is a good idea perhaps every six months to completely clean the instrument including an internal vacuum. It is quite safe to use a vacuum providing one is careful not to direct the suction full force into the body as the shutter may be sucked-in. By holding fingers over two thirds of the suction, blowing into the camera to stir up any dust, this clean-out can be quite a success.

Lens protection is also a must. Many people ask what is the best filter to allow for general photography (both colour and b/w) and protect the lens at the same time. Personally, all my cameras (both private and

at work) are fitted with standard UV (ultra-violet) filters code 1A. No loss of f-stops is experienced.

However, sometimes when shooting into a light source it is necessary to either add a lens hood, or remove the filter altogether as light hitting the filter surface usually enters the camera and ghosts part of the film.

The camera's battery chamber is another area in which attention should be regularly directed for a camera out of "traffic" for extended periods — or batteries left flat inside the chamber have been known to leak. It is a considerable job to clean some chambers — and can be expensive.

Under no circumstances oil a camera mechanism. Perhaps the only section any lubrication can be directed to is the re-wind crank which, on some cameras after heavy work in hard conditions, become stiff. The very slightest application of petroleum jelly will usually free this part. Again, do NOT use oil for it may run into the camera body or film chamber.

A reader also asked me to comment on neg. and slide care. This in fact is a good question and one which should receive the greatest of importance. Nothing is worse than spending hours/days or weeks going to tremendous effort and expense shooting good material only to have most of it ruined in a matter of weeks or months by poor handling.

(I know one fellow who carries tremendous material around in his wallet and is constantly pulling slides out in sunlight or dust and giving people a look at them and thus they

receive a collection of excellent fingerprints.)

Always use neg. files for b/w or colour negs. These can be purchased at popular camera stores and perhaps the plastic ones are the best buy for, should a neg. go accidentally into one with a drop of water on it, the strip will not stick to the file like it will when paper files are subjected to water drops.

Files capable of entering ring folders are found by many to be the best form of keeping negs. safe.

Regarding transparencies, the situation is a little more difficult for often one can not help but handle them. Again, I use plastic slide files in ring folders for my best material and NEVER take them out, even for projection! The less light reaching a colour transparency the better the colour hues will keep (That is of course if you intend to publish them at some later date).

In short, it is better to touch transparencies as little as possible. This of course eliminates the danger of nasty fingerprints or dust and dirt. For anyone wanting to view their work all the time, perhaps the best file system is the circular projector magazines. These can be closed up to eliminate light and to keep most of the dust out.

One other point, never store negatives or transparencies in cold damp sheds or garages as mould can grow on them if let lay long enough. Keep them in the home where there is even warmth.

Trusting these few comments may answer the many letters received.

A SPEED LIMIT DEVICE FOR LOCOMOTIVES

John. S. Glastonbury describes how he developed a simple electronic circuit to control locos that run at unrealistically high speeds.

The serious modeller who wishes to run locomotives made primarily for the toy market, such as the Lima C38 class, finds that the speed of the model is too fast for prototypical running. One way to overcome the problem is to limit the speed of the locomotive with either a lower voltage supply (which is then restrictive on all other models) or to fit the locomotive(s) with a speed restriction device, one of which is described in this article.

The device described uses transistorised control circuits and is mounted in the locomotive tender. Following some experiments with resistors to limit the locomotive speed (which worked with a simple rheostat controller, but not with the control of a transistorised throttle with inertia feature), it was found that the starting voltage increased from approximately 2.5 volts (on the track) to about 6 volts when a 15 ohm resistor was used in the locomotive. The resistor also attenuated the back EMF from the motor, so lessening the desirable control of the transistor.

The objective was to limit the top speed without significantly affecting the starting voltage, so that double heading with a brass locomotive was possible without excessive slipping and that the throttle settings, for a given speed, were similar to that used for a brass locomotive. The simplified experimental circuit (Fig.1) was made to determine the values of the resistors R1, R2, and R4 (for the final circuitry), a potentiometer replacing the resistors and for convenience the circuit was connected in one lead from the throttle to the track. This experimental circuit only allows single direction control. It should be noted that the values for resistors R1, R2, R3 and R4 in the final circuit are for the latter series of Lima C38 locomotives that have a resistance measurement of approximately 10 ohms measured across the brush holders, but including the headlamp. Early production series of the Lima C38 have resistance readings of approximately 25 ohms and it should be pointed out that the Lima 44 class is again different having a resistance of about 55 ohms. So it therefore may be desirable to make up the experimental circuit, to determine the resistor sizes, for speed limiting devices for the earlier produced C38 and 44 class locomotives.

Circuit Operation.

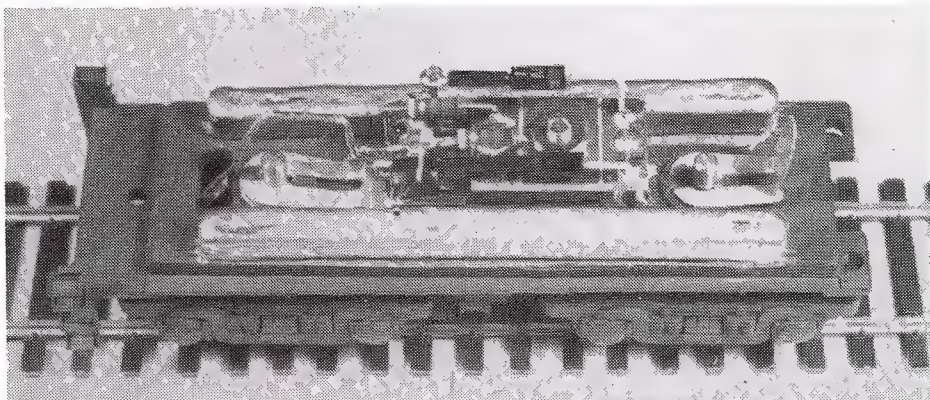
The circuit is essentially a simplified transistor throttle with a fixed setting inserted in series with the motor and made for both plus and minus operation to allow forward and reverse running at the controlled speed. The incoming current from the track is allowed to pass to one side of the circuit through the relevant diode passing that polarity where a voltage is developed across

Component List

- Q1 Transistor MJE 2955 1 off
- Q2 Transistor MJE 3055 1 off
- R1, R3 470 ohm ½ watt resistor 2 off
- R2, R4 560 ohm ½ watt resistor 2 off
- DL, D2 Diode EM404, 1N4004 or equivalent 2 off

Small piece of Printed Circuit Board,
⅛" nut & bolt, plastic sleeving.

Approximate cost of components if purchased from competitive electronic parts shops ... \$3.00.



The complete device fitted to a Workshop 5 tender chassis — the input wire soldered to the brass strip and the output wire to the severed strip to the drawbar connection. New weights have been attached with epoxy cement. J.S. Glastonbury photo.

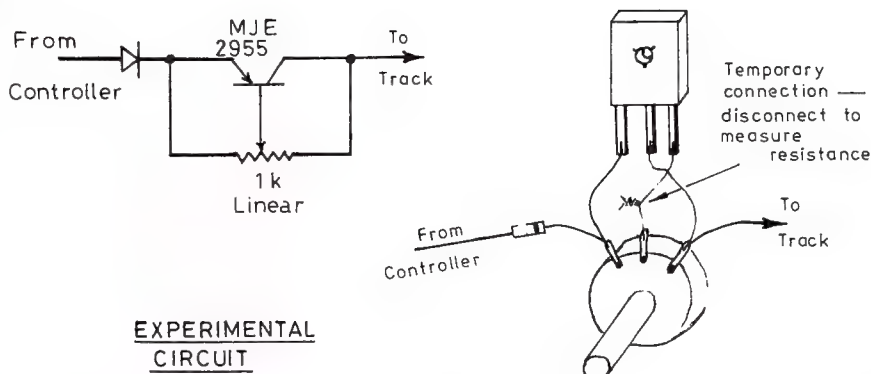


FIG. 1

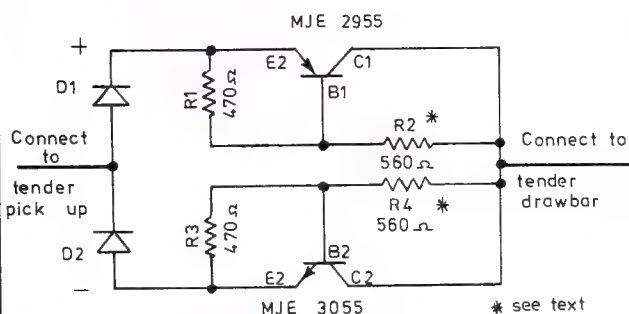


FIG. 2

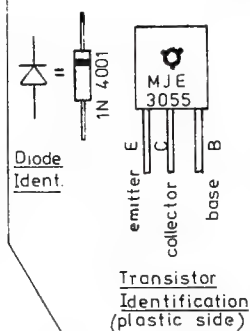
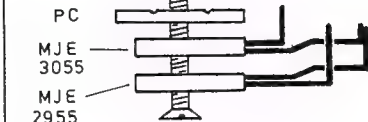
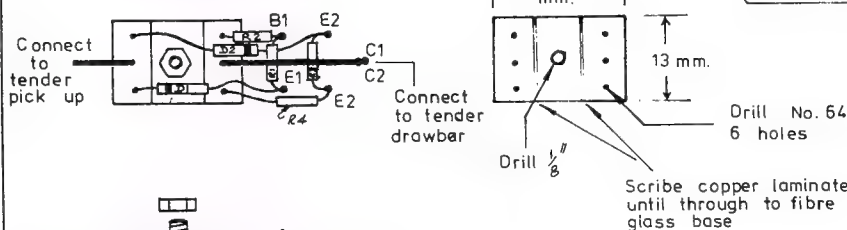


FIG. 3

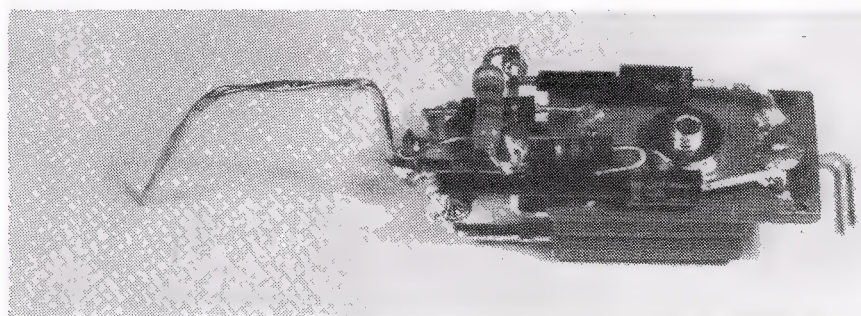


resistors R1 and R2 (or R3 and R4), the junction of which is connected to the base of the transistor. As the voltage increases the transistor turns on (proportionately) to supply current to the motor via the tender draw bar.

Construction.

The transistors used are the 'flatpack' version of the common power type 2N3055 and 2N2955 and are called MJE 3055 and MJE 2955. Because of their physical size they can be accommodated in a locomotive. They are connected as a complementary pair in this circuit and can be bolted back-to-back for easy connection of the collector legs and, incidentally, providing heat sinking for each other, although this was found unnecessary as the Lima motor only draws about 0.25 amps, providing negligible heat.

The transistors are bolted together as shown (Fig.5) onto a small piece of printed circuit board prepared as per Fig.4. Bend the transistor legs to form terminal posts and mount the components using plastic sleeving over bare wires to eliminate short circuits. The brass strip joining the tender bogie pivot pins to the drawbar should be cut between the leading pivot pin hole and the screw hole at the top bend. Solder a wire from the brass



The speed limiting device shown assembled and ready to install in a LIMA C38 class tender or a Workshop 5 C38 class tender kit, for use behind a LIMA C38. J.S. Glastonbury photo.

strip connecting the bogie pivot pins to the input of the speed control device and solder a stiff wire (remainder of diode or resistor lead is suitable) from the output of the device to the separated brass strip section that connects to the draw bar screw. Adjust the wire to hold it in position for the drawbar and screw.

With this circuit fitted the original Lima weight block was not used, new weight strips being cast in plaster mould, using a length of 6mm square strip timber as a pattern.

Conclusion

With the availability of sub-miniature potentiometers (and spare space in the locomotive or tender) the fixed resistors could be replaced which would allow running adjustment of speed control. In order to prevent motor damage (by stalling) the top speed setting should be such that the locomotive will still slip if heavily overloaded on a full throttle setting.

STOCK WAGONS OF THE TGR. — PART 1

Continued from page 18

During 1970 and 1971 twenty-four H bodies were used to build 12 HC Class bogie cattle wagons.

The HA and HC Bogie Cattle Wagons

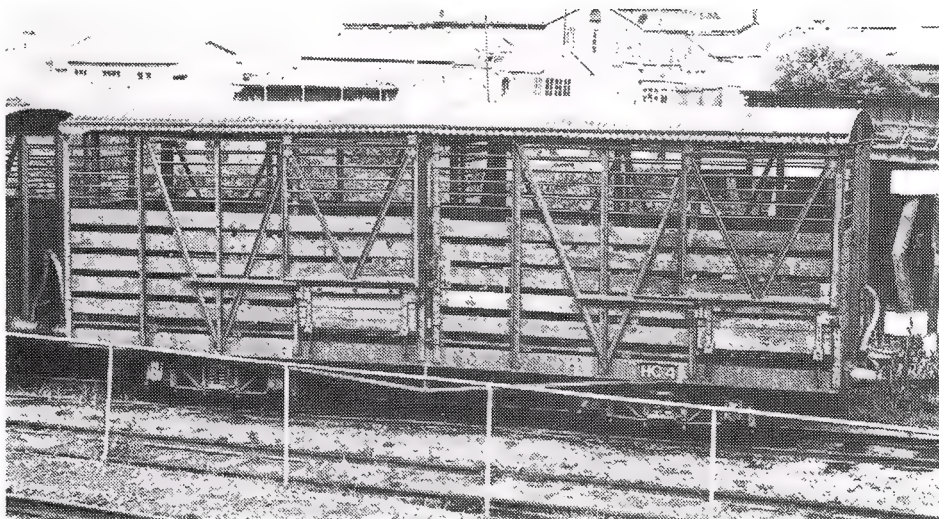
Both vehicles are identical in dimensions and have a fixed partition across the middle. All were built on CC Class (bogie open) steel underframes, and fitted with vacuum brake cylinders. Both classes are rated to carry 14 tons, but their tare weights differ (as a result of the different methods of construction). The HA weights 11t - 14cwt, the HC 12t - 1 cwt.

Both classes were built in 1970 and 1971. The HC bodies, however, were made up of two four wheel H Class cattle wagons, while the HA bodies were built up from new. The visual differences between the two classes are the external bracing, and door placement. The HA has sliding doors at both extreme ends, while the HC has its sliding doors on the right hand end of each half, both sides being identical. The photos show the differences clearly.

The HA Class cost \$3,800 each to build. This contrasts sharply with the \$5,000 to \$7,000 it cost to build the HC's, with their old H Class bodies. With the HA's new bodies, why were they so much cheaper? Perhaps it was an accounting exercise. It is speculation, but it may have been that the H Class bodies were counted as a 'loss' of existing stock when they were put on top of CC Class underframes, and hence their book value was added to the construction costs of the HC. The HA's, on the other hand, represented no loss of existing stock, so their \$3,800 would have been construction costs only.

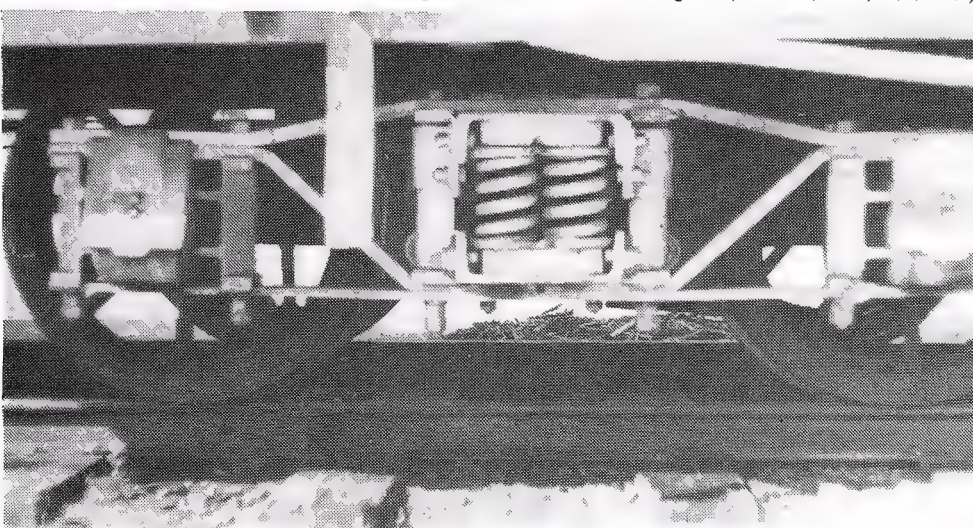
All 15 HA Class and 12 HC Class wagons were still in service on 30/6/76.

For modelling purposes, it is of interest to note that the TGR outline diagrams show the brake cylinder 2' - 6" away from the middle of the wagon, towards the A end. Note the photo of HA 11 which shows it clearly in the middle. The cylinders were, however, 2' - 3" outboard of the longitudinal centreline of each vehicle.



HC 4 showing doors at right hand end of each compartment.

Bogie as used on 15 ton wagons (i.e. 'EE', 'CC', 'QQ' etc.)



To be continued.

BUILDING A 442

David Allen describes how he scratchbuilt his first locomotive.

The 442 is my favourite locomotive on the N.S.W. system and it just so happens that it is a fairly simple shape, so for my first attempt at scratch-building it was the logical choice. I will stress now that this article is designed for beginners, especially those who say they cannot scratch-build. Proficient modellers could knock this over in no time at all. South Australian fans can make a 700 class from this also.

After making up a drawing of the prototype, I found some areas that would give me trouble, and the thought of making it was a harrowing prospect; however, I encouraged myself to "have a go" because I knew I wouldn't have one if I didn't try. Just a couple of notes for beginners:— I would suggest that you practice scribing and cutting lines and practice using MEK to "get the feel of it". If you do something wrong, go back and try it again. Above all, be patient and careful. I learned a lot from this experience (e.g. don't knock over MEK bottles), and despite all the frustrating moments, it is worth every minute of it when you see it going around the track for the first time.

You will need:

- 1 Tyco SD24 locomotive, or alternatively, just the bogies and holders.
- MEK, and various plastic glues.
- 2 Lima 44 buffing plates.
- Styrene sheet—1.5mm, 1mm, .5mm, & clear styrene.
- R.T.M. and B.R. transfers. Also A.M.R.I. yellow stripes.
- Couplers (I used Kadee's).
- Small files.
- 2 5-chime horns, if you can get them.
- Cutting knife, scribe, rule or straight edge.
- 1/8" diameter dowel.
- 0.020 swg wire for handrails.
- 1 tin signal yellow, LMS maroon, GWR chocolate, and matt black.
- Compass or dividers.
- Various photos + PTC's "Modern Locomotives in Service on NSW Railways" are most helpful.
- A strong will and determination.

While the above list may seem rather long, you will probably have some of these things at home. Alright then: if you are ready, we shall start.

The Chassis.

Firstly disassemble the Tyco locomotive. This may take some skill and stamina as you will find out. Retain the bogies and the black plastic holders that they swivel in. Take some 1.5mm rigid styrene and cut it out to size so it is slightly less than the length and the width of the locomotive (442 that is). Later, when the body is finished, parts of it will have to be filed down or added to so that the locomotive's body will "sit" on this chassis neatly. On the piece you have just cut out, mark out the position of the bogies, taking care that they are the right distance apart, and in the centre. On the bogie holders there are 2 pieces of plastic protruding width ways. Cut and file off so that they are the same approximate width as the inside width of the locomotive. A bit less does not matter at all. (This only occurs on one of the bogie holders anyway). Glue the bogie holders into position on the piece of styrene. You will find the 1.5mm styrene is not substantial enough to keep the thing stiff, so cut out a length of styrene about 1/4" wide, to



All photos by A. Brown.

go on either side of the bogie retainers. (See photo of chassis). Glue them on with MEK on either side, taking care that it is flat. You might have to put weights on each end of it while the MEK hardens. The resulting frame should be quite strong. Clip the bogies in and temporarily connect the wires and make sure it goes. We will worry about the air and petrol tanks when the body is finished, as it is much easier to get the correct size then. Again, a photo shows the complete chassis, complete with fuel and air tanks. As can be seen from the photo, the petrol tank also serves the purpose of holding weights. Paint the bogies black in the case of the 442. If you are making a 700 leave them silver. We will return to the chassis after the body has been completed.

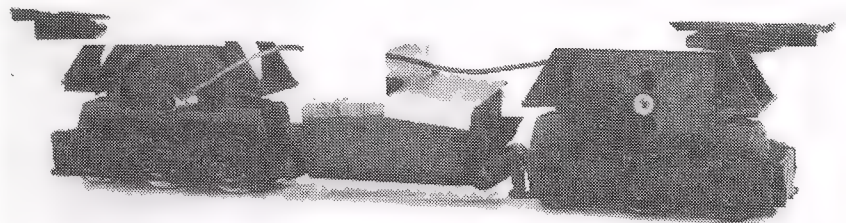
The Body.

Mark out the sides and detail on thick styrene (1 1/2mm) to shape as Diagram 1. Cut the two sides out. File out the windows. Be careful doing the side windows so that they are square and in line. Scribe out doors, panels, vents, etc. Cut out a hole in the appropriate places on each side for the staff exchangers. Glue a thin piece of styrene to the back of each of these holes. Use scraps of styrene and thin wire and glue them on to look vaguely like a staff exchanger. The resultant pair of sides should look like those

in diagram 2. The quarter vent part of the window will be added a little later. Make sure the outside dimensions of each side are identical. Laminate a very thin piece of styrene to the bottom of each side. It is not obvious at first but a closer look at photos reveal this. The sides are the most tedious part, especially scribing all the vents and things. The angled part and the roof will be done after the next stage.

Next we will make the lower half of each nose. Cut out two pieces of thin styrene, which are slightly bigger than full width of body. Carefully bend each piece down the centre and laminate them together. The MEK will take a while to set and thus give you time to get the correct angle. Make another one for the other end. For each end footboard cut out a piece of styrene, bend as for the ends and glue on at the bottom of each nose. Set the two locomotive sides the correct width apart using blocks of wood. They can be held in place by placing rubber bands around them. When they are set exactly in place you can glue the two ends on to form the fronts. When MEK has set and hardened you can file down the excess overhang. Remove the rubber bands and blocks of wood. You should have something roughly like diagram 2.

Now we will make the angled side of the roof. Cut out a piece of styrene the



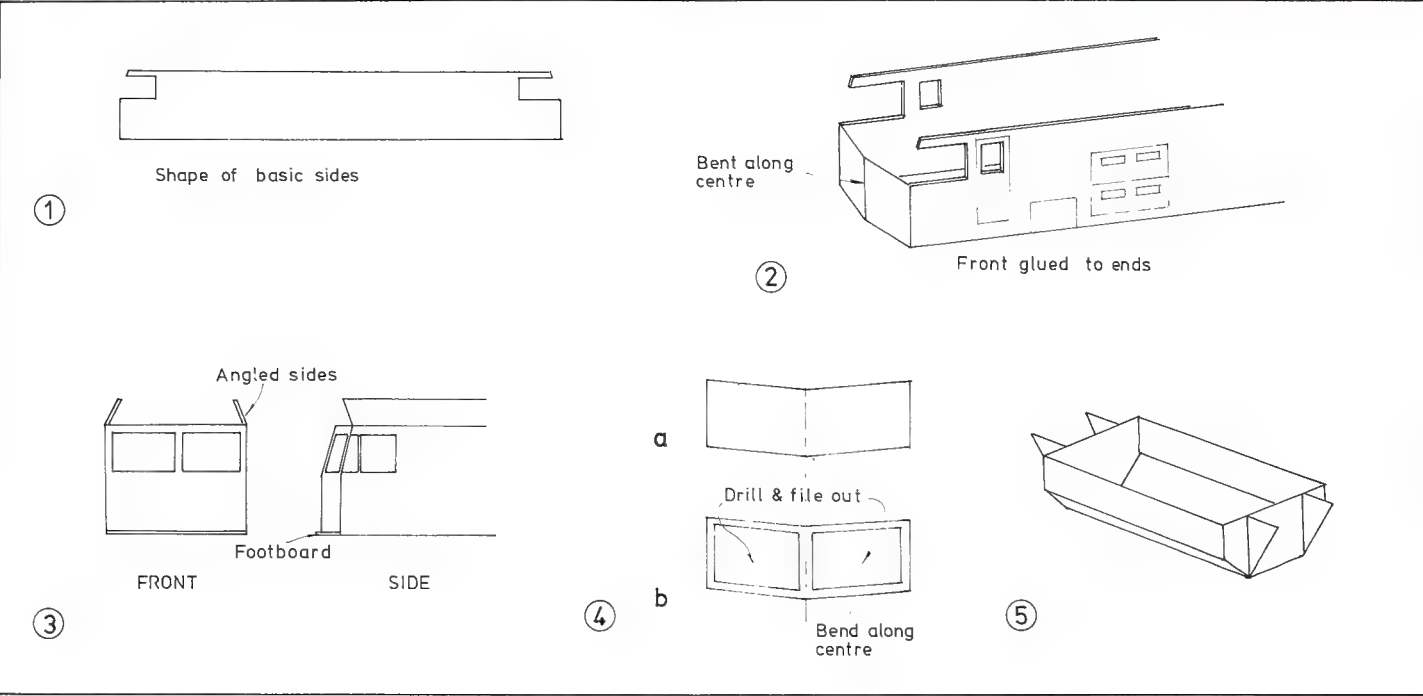
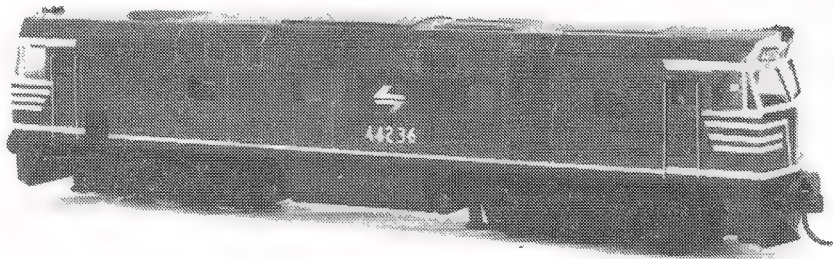
appropriate size for the angled part. Be very careful scribing out the detail so that it matches up perfectly with the vent detail on the body sides. Laminate another piece to the back of it for added strength and chamfer the bottom edge to approx. 45 degrees. This makes it easier to position and glue on. Carefully glue each one on and file off any overhang after the MEK has hardened. It should now look like diagram 3. Now we shall add the front windows. Do not be flustered or hypertensive if these do not turn out first time. I had to make 5 of them before I came up with two that were satisfactory. Even so, at the Number One end the windows "frown", as can be seen from the photo. This was also partially attributed to the fact that the thing caved in, due to an excess of MEK. Firstly look at diagram 4 to see what is to be done. More experienced modellers may devise a more satisfactory way of doing this. Cut out a piece of flexible styrene to roughly the shape of figure 4a. Get the external dimensions to size by filing down, after bending it down the centre. You will have to fiddle around with the angle to get it right. Draw in the area that is to be filed out. Be careful filing out the window hole. It will break very easily if treated too vigorously. When you have got it to fit into place accurately you may MEK it on. Repeat for the other end. It would be wise to pack a small piece behind the top edge of each one, as it will need the strength for the stage after the next. Just before this I accidentally knocked over the MEK bottle. The consequences were dire. Fortunately the 442 was plucked from the scene and escaped unscathed. However, I laminated two sheets of styrene to the desk (which took me as many days to remove) as well as sticking many small scraps and pieces to the desk. It also destroyed my drawing and made the print run in the locomotive book. The smell of the stuff is bad enough just with the bottle open, but you should smell it when the desk is flooded with it!

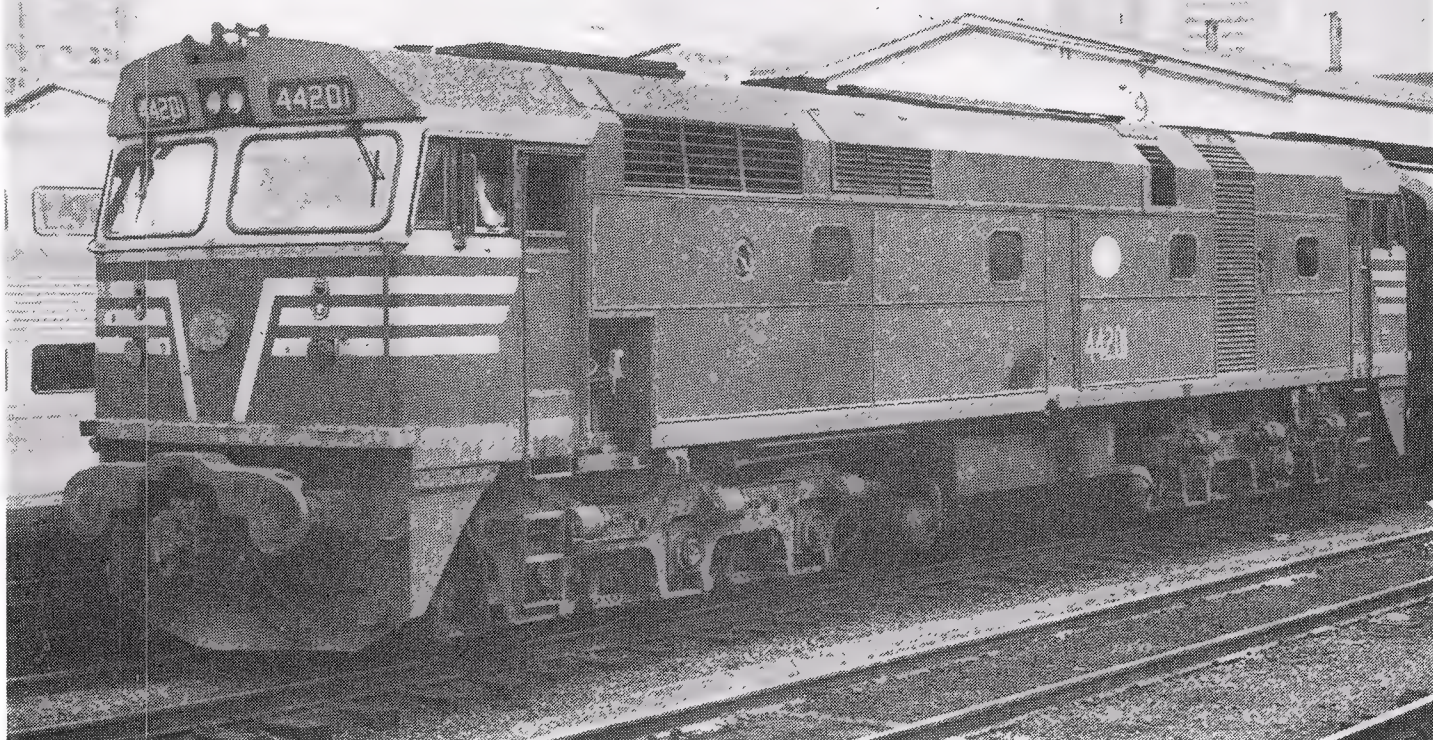
Now the rest of the roof will be added. The roof of mine was originally the side of a Johnsons Baby Powder bottle, because it had a nice gentle curve. I scrapped that, however, because the plastic was rather unsuitable. It would not file, glue, or anything. Instead, I used two sheets of laminated styrene. The roof should butt perfectly against the angled sides when it is filed down to size. Be careful when laminating the two thin sheets together that there are no air bubbles trapped in the

middle, or you will end up with an unsightly bulge (my model suffers this). The styrene is easy to bend into a curve, once the MEK softens it. Make sure you have left some overhang at the end, as the ends are curved, from a plan view. Once it is glued on, wait for some time for the styrene to regain its full strength. After this, file each end down to the correct curvature, and also file out a square shape in the middle of each end where the horn is to go. Under this hole, pack a thick piece of styrene, and glue on, after getting the rough shape of this hole first. File out flush with the original roof hole. The result should give the look of a neat recess for the horn to be positioned in (after glueing in another piece under this for a mounting platform, so there is not just a big hole there).

This coming stage is possibly the most tedious part, requiring a lot of care. We are going to make the panel (forehead) which is located above the two front windows at each end. (Before this, however, it would be advisable to make out a small piece of styrene to resemble the quarter vents.) Glueing the forehead into place is a little difficult. Use a flexible thickness of styrene for this panel, as it is difficult to position and glue in. Cut the pieces out slightly oversize, and bend into a curve. Alternatively, you can laminate two thin pieces together into a curve. This might be easier, especially for beginners. File the bottom of it curved slightly to allow for the angle at which it is set on the prototype. Now carefully cut a small square out where the

Continued on page 34





44201 at the head of the Intercapital Daylight Express, Sydney terminal 1976. Note the pipes to the transverse air receivers (adjacent to fuel tank). The pipes enter the receiver on the end, making them one of the widest points on the locomotives. Other photographs suggest that on 44216 onward the air pipes have been relocated to enter the receivers from the top, 200mm from the end. See photo of 44222. Howard Smith photo.

N.S.W.G.R. 442 CLASS DIESEL ELECTRIC

GENERAL SPECIFICATION

Engine Model	Alco 12.251C
Engine Type	Turbo supercharged 4 stroke
Number of Cylinders	12 V. Formation
HP of Engine	2150
HP available for Traction in Generator	2000
Traction Generator Type	GT586 (1-3) AEI5301 (4-5) AEI5302 (6-20) AEI5301 (21-34) Mitsu Alternator (35-40)
Traction Motor Type	GE752 (1-20) AEI165 (21-34) Mitsu MB-451-AUR (35-40)
Number of Traction Motors	6
Axle Load	18.8 tons
Total Weight	113 tons
Wheel Diameter	40"
Bogie Wheelbase	11'2"
Distance between Bogie Bearing Centres	38'5"
Length over Headstocks	57'1"
Length over Coupling Faces	61'3"
Height (max.)	13'11"
Width (max.)	9'7½"

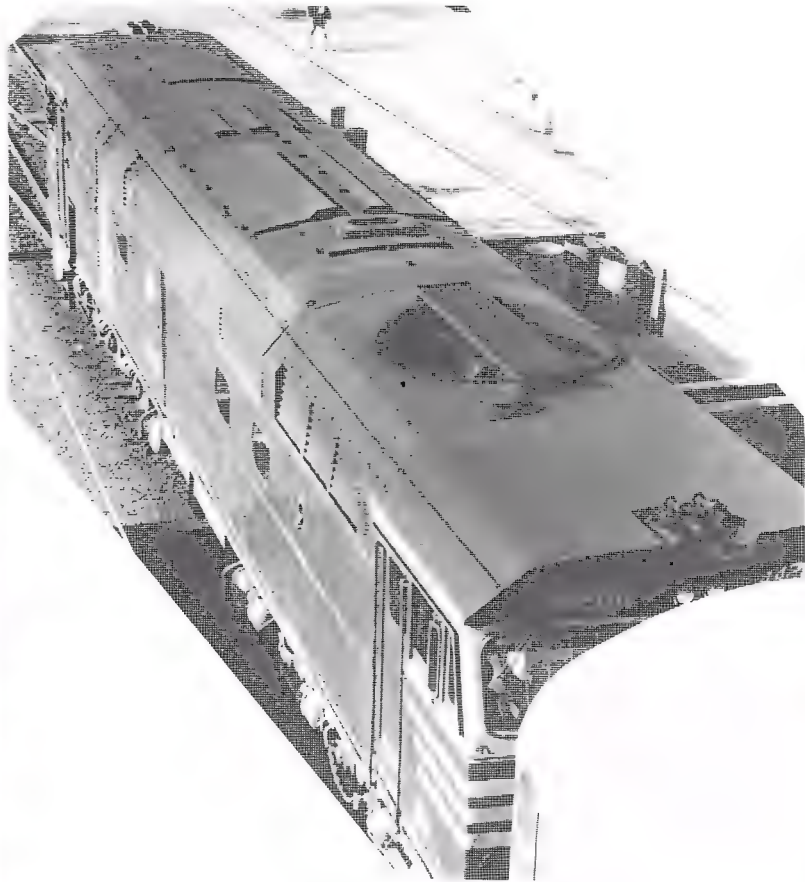
PERFORMANCE

Tractive Effort at 30% Adhesion	75,900 lbs
Tractive Effort at 20% Adhesion	50,600 lb.
Continuous Tractive Effort	52,000 lb. at 11.6 m.p.h.
Maximum Load and Speed on a Grade of 1 in 40	600 tons at 11.75 m.p.h.
Maximum Speed	75 m.p.h.

In January 1970, the N.S.W.G.R. placed an order with A.E. Goodwin Ltd. for the supply of 20 diesel electric locomotives of 2150/2000 H.P. The condition of the contract was that A.E. Goodwin Ltd. must accept the then aging 40 Class diesel electrics as trade-ins and to use components from the 40 class, suitably reconditioned, in the new locomotives.

Clearly little of the 40 class could be used as the three major components of a locomotive are the frame/body, the diesel motor and the traction generator. The last two mentioned were unsuitable as the new units were to provide a 25% increase in output over the 40 class. Accordingly only the traction motors, auxiliary generator, power take-off, compressor and eddy current clutch were re-used in the new order. Further, one would not have to have a degree in mathematics to show that the twenty 40 Class locomotives would yield only 80 traction motors, less 8 for the units resold to Cliffs Robe River Mining.

Accordingly the short fall in traction motors was made up from second hand motors obtained from the Missouri Pacific Railroad in the U.S. These motors were overhauled by GEC-AEI before reuse. A.E. Goodwin Ltd. added to these second hand bits a new flush nosed twin cab body, an uprated Alco 251 C V 2 diesel engine and a variety of traction generators as listed in the



Overhead view of 44208 at the head of the Sydney bound Southern Aurora. Note 42212 in the background which also illustrates the differing lining between the two similar style classes. Graham Ball photograph.

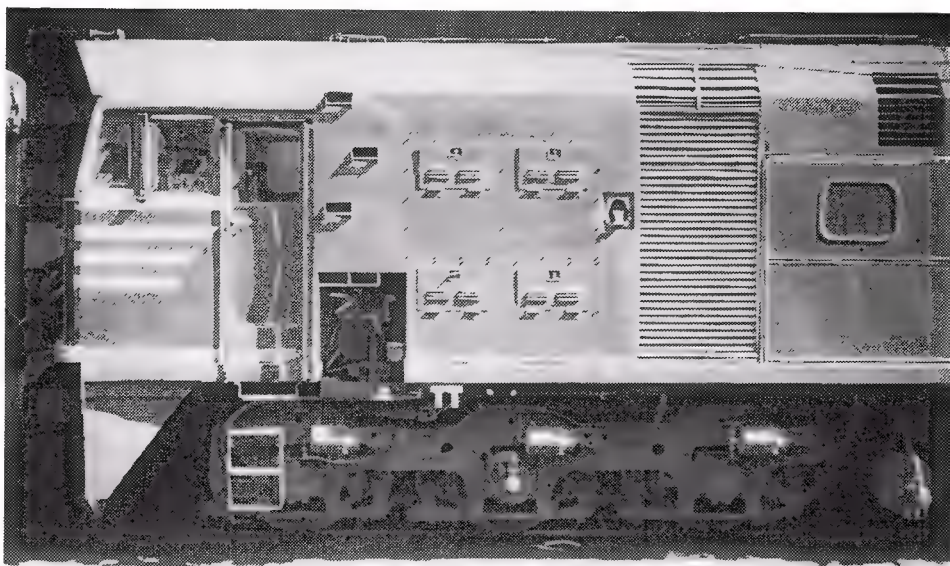
specifications. The Alco diesel engine was an uprated version of that used in the earlier 45 class (251C) and 44 class (251B).

In general appearance the new class had obvious common design ancestry to the 422 class from Clyde. However the Alco units could be distinguished by a slightly more angular appearance, the use of square body side windows, dynamic brake cooling ventilators and the single radiator cooling fan on the roof. Another distinguishing feature is the positioning of the five chime horns in a recess centrally located on top of the cabin. The usual N.S.W.G.R. features of buffing plates, transition couplers, twin multiple unit receptacles and auto staff exchangers are included in the design.

Technically the only major design change (at least in the first 20), compared to the earlier 44/45 class, was that the new class was fitted with a new "high adhesion bogie". This type of bogie basically has all the traction motors on the same side of the axle instead of the previous convention of reversing one motor so that all were "within" the axle centres. This meant that one motor was rotating in the opposite direction to the other two and so produced opposing forces in the bogie. The new design is reported to give a much improved performance.

The class is also distinguished by a minimum of yellow paintwork on the cab ends and body sides. This has of course been changed recently by the reverse paint scheme of 44208.

The first unit was handed over to the N.S.W.G.R. on 21st October, 1970. However following trials during December and January the locomotive was returned to A.E. Goodwin Ltd. due to rough riding at speed. After fitting of modified bogies 44201 was finally placed in service on 29th March, 1971. As further deliveries were made some other problems were found, namely frame cracks in 44202 and 44208 and minor bogie and shock



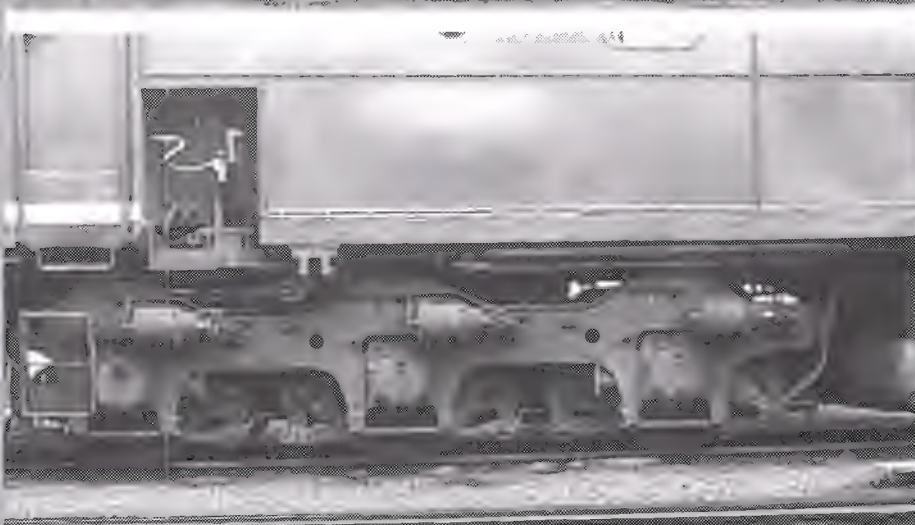
44205 at No.1 platform Sydney Terminal. Howard Smith photo.

absorber problems but nothing of a major nature.

A repeat order for an additional 20 units of the 442 Class was placed by the N.S.W.G.R. in June, 1970. This raises one interesting point about deliveries of the class. The sequence was normal up to 44215 and then came 44221, 44222, 44223, 44224, 44225, then 44216 through 44220 and then back to normal. Maybe a shortage of reconditioned traction motors! the most notable change in the second order of 20 was the use in 44235 — 44240 of Mitsubishi electrics including the use of an AC alternator and rectifiers in place of the previous DC generator supplying the traction motors directly. This was truly a major technical change, also included in the 47 Class being built at the same time.

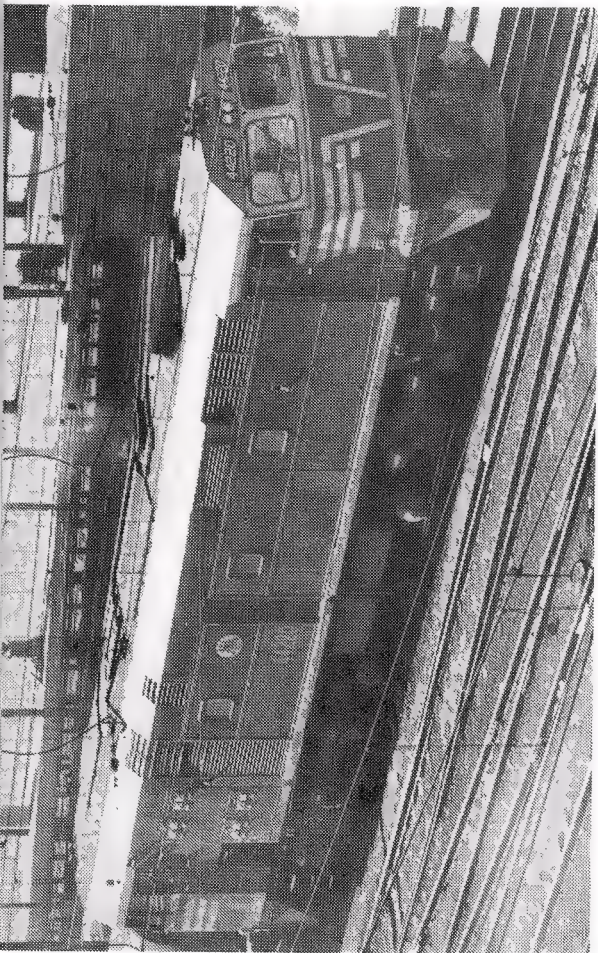
Besides the riding problems mentioned earlier the class entered service with little more drama than any other class. The first few available to traffic as usual were used for crew training with all of the class being allocated to Delec (Sydney) on acceptance. First division to see the class in strength was the South followed by the North Coast and the Main North. Although trials were conducted as far as Broken Hill it was not intended to use the 442's on the West. They have appeared there over the years very infrequently. However it is timely to include a note on the South Australian 700 class at this point.

The S.A.R. had an outstanding order for six 930 class (almost identical to the 44 class) when the new 442 class design was unveiled.



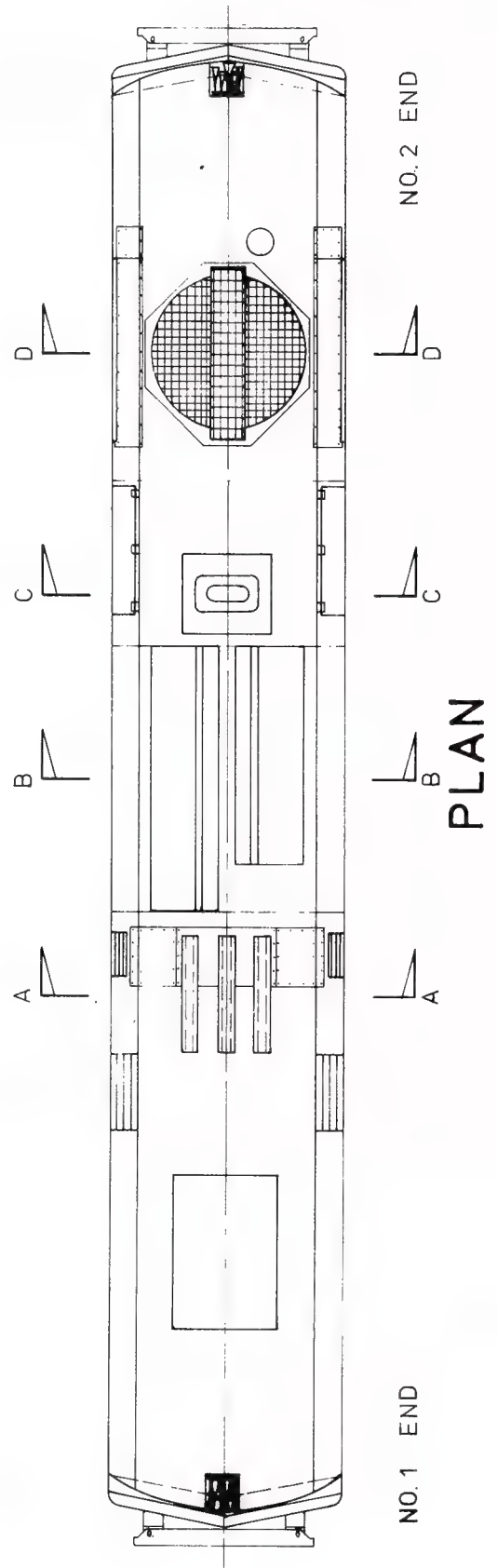
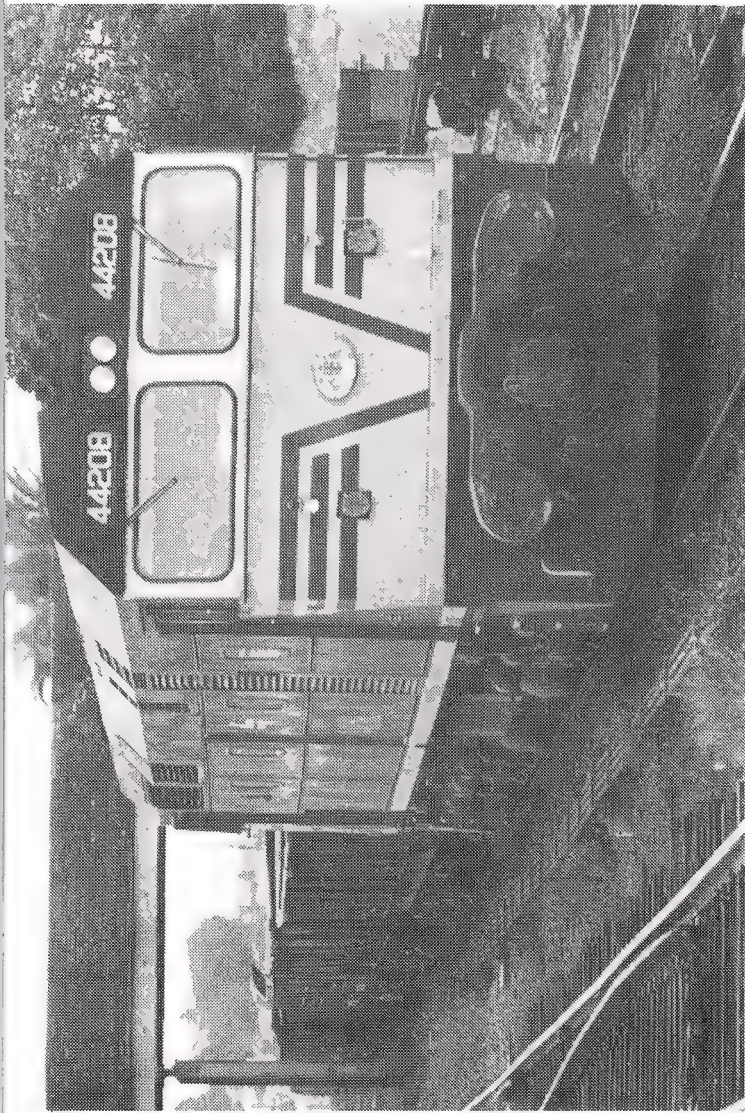
Fuel tank and transverse air receivers of 44222. These photographs supplied by Graham Ball illustrate the repositioned entrance to the receiver of the air pipes. (Carried out on locomotives 44216 onward).

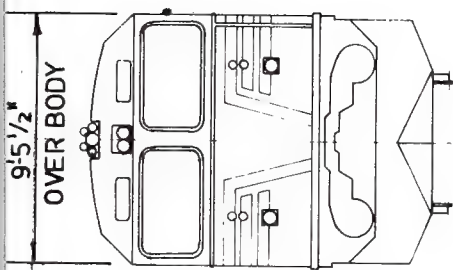




44220 at Darling Harbour in 1973. Howard Smith photograph.

44208 shows the latest paint scheme of the 442 class. The change to yellow front was made to make the locos more visible particularly on long stretches of country track. Photo by Howard Smith.

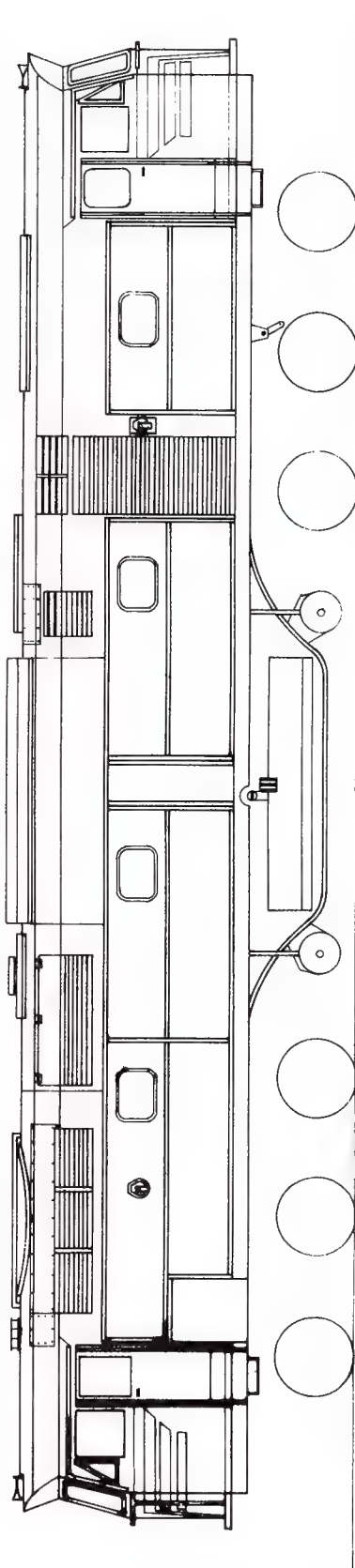
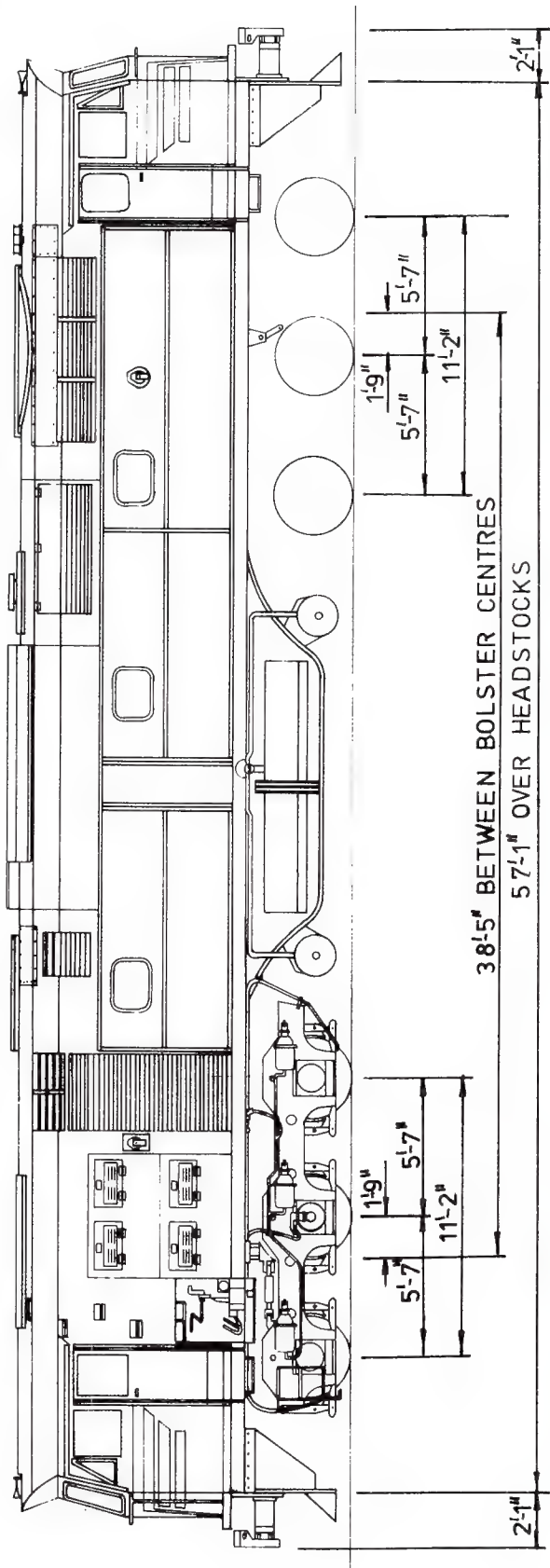




SECT. B-B



SECT. A-A



ELEVATIONS

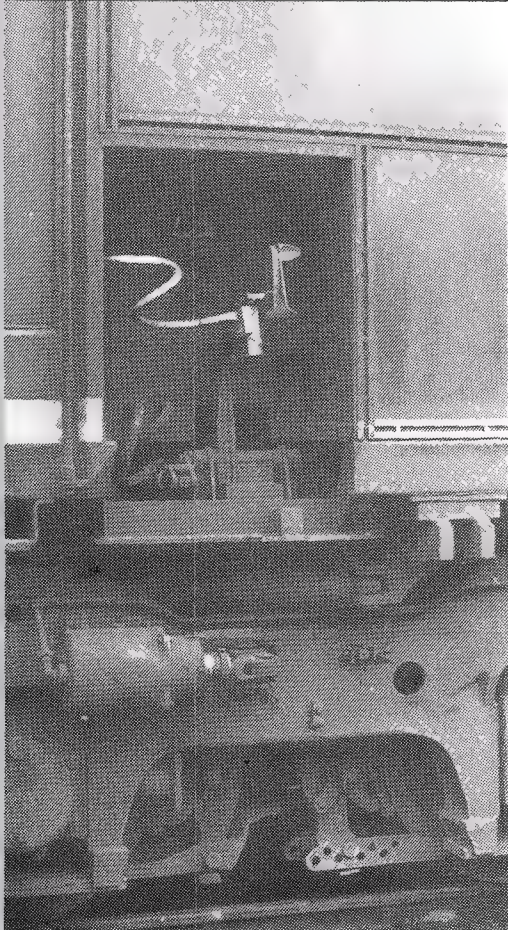
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DRAWN : HVS. DEC. '76

P.T.C. OF N.S.W.

442 CLASS LOCOMOTIVE





Staff exchanger of 44222

The S.A.R. changed to the new design and classified them 700 Class. These units are identical in specification to 44221 — 34 with the exception of a reduced axle load at 18.5 tons. In appearance they differed in having only one M.U. receptacle, an absence of buffing plates and the auto-staff exchangers being on the opposite side of each end of the locomotive. The S.A.R. use right hand staff exchanging. A more detailed article on the 700 Class will be published in the next issue of A.M.R.M. For some months in 1979 the 700 class, now A.N.R., were used between Broken Hill and Lithgow on the Indian Pacific as well as some short runs during the lay-Over.

The running shed crews soon came up with the nickname "Jumbo" for the new 442 class, an appropriate name whether applied to physical dimensions or power output. In reality they are a little bigger than the 442 or even 44 class but their lines do give an impression of size. Today they still work the Southern, North Coast and Main North Divisions as well as the South Coast to Port Kembla, and can be occasionally seen working the Central West Express. They are regularly rostered to the Northern Express including Brisbane Limited, Gold Coast Motorail and North Coast Daylight. The class is seen on Southern expresses but on a less frequent basis to the G.M. Class.

The Jumbos are popular on the coal road especially since the beginning of the Gunnedah coal working began. The roster often has as many as three 442 Class + one 48 class working these trains over the Liverpool

Range between Willow Tree and Murrurundi. The best photographic locations are the aforementioned Liverpool Range and the North Coast on the down between sunrise and about mid-day. The sun is perfect for colour at the latter locations! Rosters for the 442 range from express passenger to interstate freight to coal haulage. With the shortage of big power they are seen infrequently on local freights.

The modeller however has a very universal model if he chooses to include a model of the 442 Class in his motive power roster. In model form they look particularly good when doubled with a 44 or similar less angular model so a second unpowered locomotive is worth considering. The accompanying model-building article produces a fine model and there is also a strong rumor of a brass 442 by the end of the year—early next year.

A.M.R.M. plans, along with the SAR 700 Class to print in colour at least one photograph of the 442 Class in the January/February 1981 issue. Colour photographs of both schemes currently in use can be seen on the rear of the July 1980 issue of the NSW Digest, published by the NSW Division of the Australian Railway Historical Society.

This article was prepared by Phil Collins, who utilised information previously published in the A.R.H.S. NSW Digest and the booklet 'Modern Locomotives' published by the P.T.C. of N.S.W.

BUILDING A 442

Continued from page 28

headlights are to go from each one and glue a small piece behind it. For beginners I would suggest that you just paint this recessed square white with two small blobs of silver to represent headlights. I will describe briefly how I did mine: I drilled out a small piece of styrene, with two holes side by side, using a 1/16" drill. This was glued into place using MEK. It was painted silver, and a piece of styrene cut to size (clear styrene that is) was glued over that. I am aware that this is not prototypical, but my skills and manual dexterity do not allow me to do it any better. Do not do any painting of this until the model is ready for painting. Anyway, back to the panel. When the piece, and you, are ready, very carefully glue it on with MEK. You may have to hold it down for several minutes. Don't be worried if there are any gaps or imperfections in it, as these can be filled later. Repeat this stage for the other end. Leave the MEK to harden for a while. File down the overhang and hopefully you should have some nice crisp detail. You probably have left finger prints in the softened styrene, so file this back as well. If you have come this far successfully, then the rest is clear sailing.

The fan was made by marking out a circle on a sheet of styrene using a compass. Scribe lines closely together, running vertically and horizontally, and then go over the circle using dividers, and carefully force it out. Clean up any rough edges or irregularities using a file, then locate and glue into place. Scribe out other roof detail on thin pieces of styrene, and glue them on into place. Overhead photos are very helpful for this.

Before we add pilots, buffers, handrails, paint, etc, grab the chassis and see how the body sits on it. Mine was the right height luckily, but I had to pack it up a bit at one end because it was not quite level. I added a bit to the low end of the chassis to rectify this. If you have followed what I have done it should just about be the right height off the rails. Also, I

had to file a little off each side so that it would slide on easier. If it sits too high off the ground I'm afraid you have problems. You will have to file some excess from both sides of the chassis and glue scraps of styrene to the roof of the body to keep it from tilting. However, if you follow the way that I did it, it is extremely unlikely that this will happen.

Measure the inside width of the body. This will be the width of the petrol tank and air tank. The styrene on the sides of my model warped after a period of time and a gap is there now. Making this is quite straightforward and simple. As can be seen from the chassis photo, there is a gap where the weights are inserted. This gap was also necessary, because it is right where one of the side windows lies (on both sides). The tanks on my model are very simple, as I feel they are beyond my degree of expertise to make really accurate. I tend to worry more about the body items than things you don't see much of. Cut out the required shapes of styrene and build onto the chassis. The bottom was achieved by bending the styrene at either side to form an angle and then it was glued on with MEK (Diagram 5). File it around the rough edges.

The air tanks were made from scraps of dowel, cut to length and sand the ends round. If you have a lathe this is easy. Glue into position using small styrene supports, which are triangularly shaped. Paint the visible parts of the under-gear black, or weathered for those who prefer. Add weights and test on track.

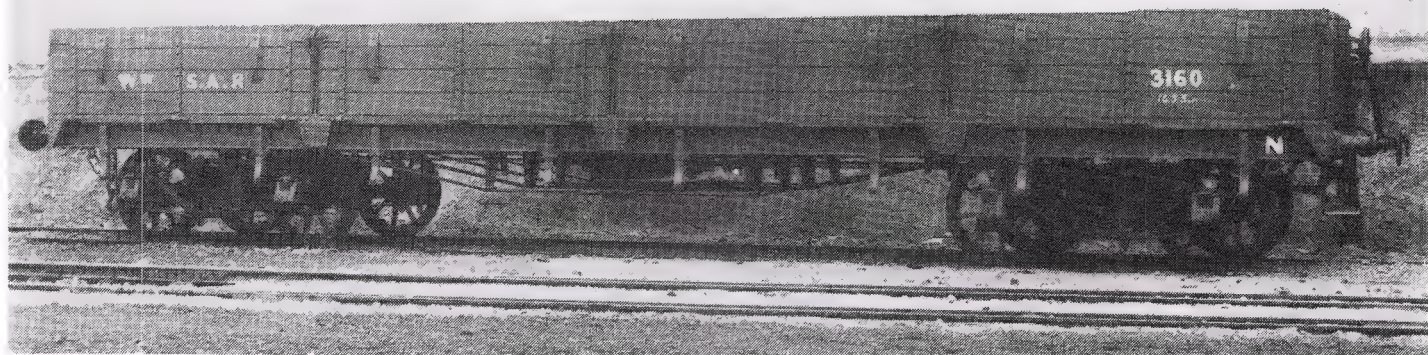
Take the locomotive body again. We are going to add pilots, buffers, couplers, paint, etc. Cut out styrene pieces and glue onto the body, remembering to leave a hole for the couplers. This operation is very straightforward; however, the snow-ploughs were a little tedious. They were built by using a series of small triangles made from styrene. Make small square mounting blocks to mount the buffers onto, and then glue the lot onto the pilots (I use supa-glue for all these items). Mount couplers into place on the pilots. Add

air hoses and things if you wish. The model is now ready for painting.

I can't paint the side of a barn, and this I feel spoils my model a bit. I gave the whole thing a coat of matt grey before I painted it brown, yellow, black, etc. The brown is a rugged mix of GWR chocolate and LMS red (but TRY it first). Pilots are painted black, so is the radiator fan and undergear. The various yellow parts are painted with signal yellow, and the stripes are carved up A.M.R.I. Stripes. The side numbers are R.T.M. transfers, and the illuminated number board numbers are the dry type Kinsprint B.R. transfers (the rectangular style). They are mounted on a little styrene board painted black. Don't glue it on with KEK; it will destroy all paint in its path, and probably your temper too. When all of the painting is finished, add pieces of clear styrene for the windows. The horns are Nathan three-chime horns, with two more glued on top of these to represent 5-chime horns. Add handrails. I only put them on either side of the doors. The more enthusiastic modeller could also add them to the front just below the windows. It would be easier in the long run to supa-glue them into place. Add pieces of ladder to the bogies under the cab doors if desired. Unless you want to add finer points of detail, e.g. marker lights, wipers, etc., that's about it. Plonk the body onto the chassis, you may have to devise a way to screw it down.

The model is smooth in operation, and with 6 driven wheels it can pull a decent load. It's been a valuable experience, and I've learned a lot from it. The main thing is that it LOOKS like a 442, which is more than I can say about some of the re-paints you see in the shops. It looks really good doubling with my 44 pulling three carriages on my 5' x 4' layout! In its early days it used to pull GWR horseboxes, but now the slowly growing collection of N.S.W. stock has taken over.

In this article I hope I have encouraged some beginners to try their hand at scratch-building, and also banish the "I can't write an article" syndrome.



Ww 3160 as built. Note the code and number are at opposite ends, the N on the chassis means that it could be used on the line through the Mount Lofty Ranges (Nairne Railway), it is equipped with buffers and chains, is painted dark grey and is fitted with a hand brake wheel.

THE W CLASS WAGONS ON THE ANR'S CENTRAL REGION

by Phil Curnow

There are two types of wooden bodied open wagons currently in broad gauge service with the ANR. The OWS group have eight doors and five plank sides. Door latches and fittings are metal castings and the centre sill is either two deep I sections or open grid work. This group will be the subject of a future article. The W class has eight doors, four plank sides and a truss rodded underframe. Door fittings and hinges are made from flat iron. Two types of handbrake are in use with either a standard ratchet lever or a 16 inch (40mm) diameter five spoke wheel being fitted at one end. The choice appears to have been at random.

A total of ninety five of these wagons were built for the SAR as class Ww in two groups. Fifty wagons (3142-3191) were built between April and June 1914 while the remaining fortyfive (4005-4049) were built in December 1915. The builder was Gray Bros. at Port Adelaide. During this era wagons were numbered in their construction sequence so 3192-4004 were allocated to other classes.

In 1979 there were about twenty remaining in service and are to be recoded AOWA. During the intervening sixty years there have been many changes within the class. When issued as Ww class they were equipped with

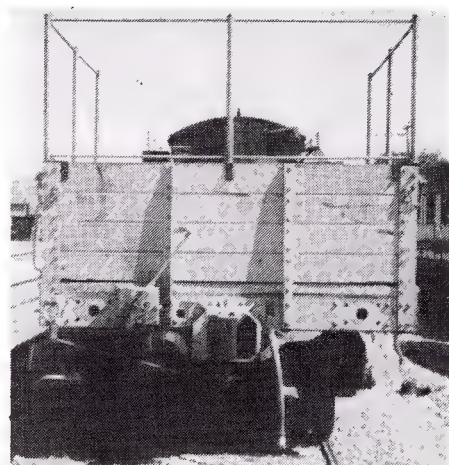
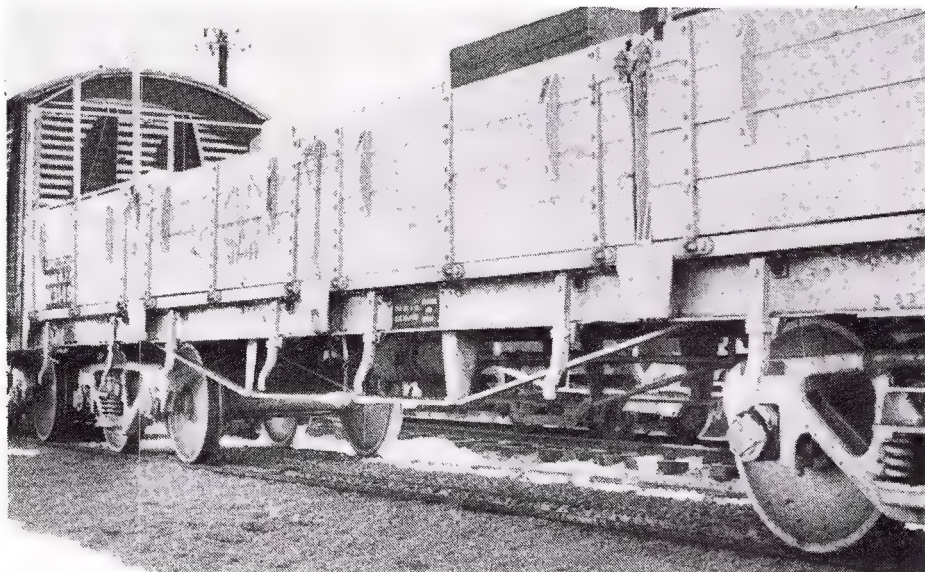
buffers, draw hooks and coupling chains. During the 1920s a group had the ends removed and were then coded WWX. In 1933 conversion of the class from draw hooks to auto couplers commenced and converted wagons were classed WA. When this project was completed the whole class was recoded W class. Buffers would have been removed around the same time. Number 3163 was used as a railcar trailer between Strathalbyn and Milang in 1930. Numbers 3144 and 4023 were fitted with passenger type freight bogies from 1939 to 1949 and classed as WP. Number 4031 was used as the basis for the broad gauge poison spray wagon which is still in service and the sleeper boring plant was built onto another W class. Other wagons were used as the chassis for a variety of tank wagons however these are now being replaced by underframes from refrigerated vans withdrawn following the success of refrigerated containers.

In the early 1960s the SAR changed its wagon colour from dark to light grey and the number was painted in white on a black background. In the late 1960s the piping shrike emblem was adopted for rollingstock and was painted in red however in 1977 this had been changed to black. Following the

takeover of the old SAR by the ANR the shrike was replaced by the 'ANR in boxes' emblem painted in red on the doors. In 1979 the rollingstock colour was changed to oxide red with the emblem now in yellow. At first the black background to the class letters was kept but within a few months the white class letters were being painted onto the red body side. I haven't seen a red W but that doesn't mean that there aren't any. Their appearance is to be further altered by recoding to AOWA effective 10/9/1979.

Approximately twenty of the class had the side doors removed in the early 1970s and are used in the Wallaroo yard area to carry pallets of bagged wheat from the bagging sheds onto the wharf. This wheat is destined for Middle East countries which lack bulk handling facilities. During temporary lulls in this traffic the doorless W class have been used as flatwagons. In 1975 a second hand sleeper handling centre was established at Mitcham and several of the class had 'sleeper traffic only' stencilled in yellow on each side.

I would like to acknowledge the assistance of David Parsons, Roger Johnson and Dean Jackson in the preparation of this article.



Ratchet lever equipped W3149 at Peterborough. This wagon was carrying equipment as part of the standard gauge accident train.



TA3181 is a sulphuric acid tank mounted on a W class underframe. Photo by Peter Fehlberg.



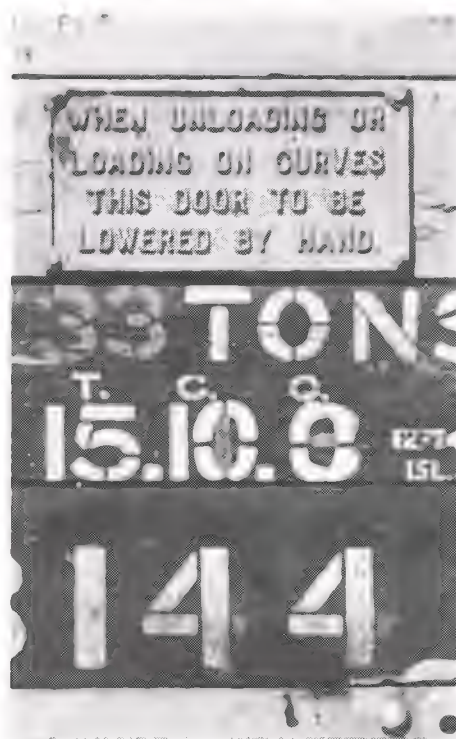
This photo by Doug Colquhoun was taken at North Adelaide in 1954. Note the different colour planks and that the number is painted onto the basic wagon colour.



W3159 at the sleeper handling depot, Mitcham 15/2/1975. The small, rail mounted unloading crane can be seen in the background



Two photos of W4029 in 1977. The number is painted onto a black background, the basic wagon colour is light grey and the piping shrike emblem is painted in red onto the third door. Photos by Roger Johnson.

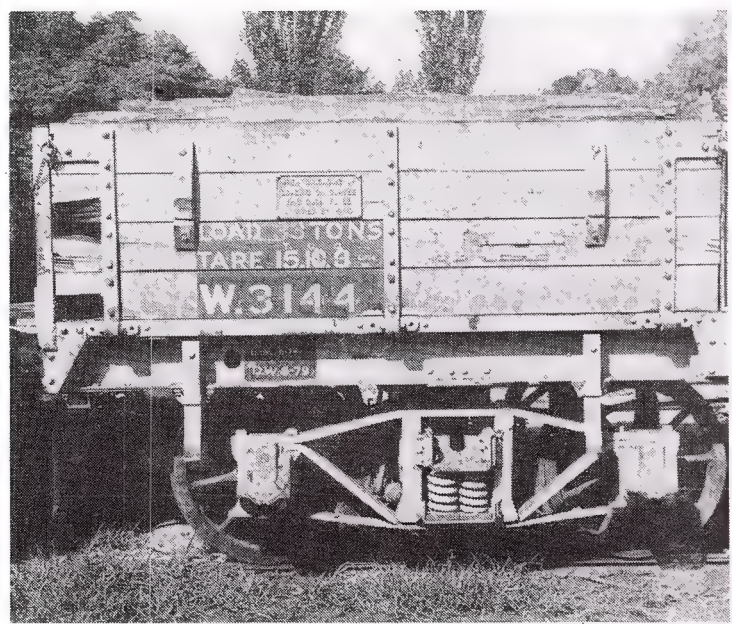


A close view of the cast metal plate attached to the outer doors of some of the W class.

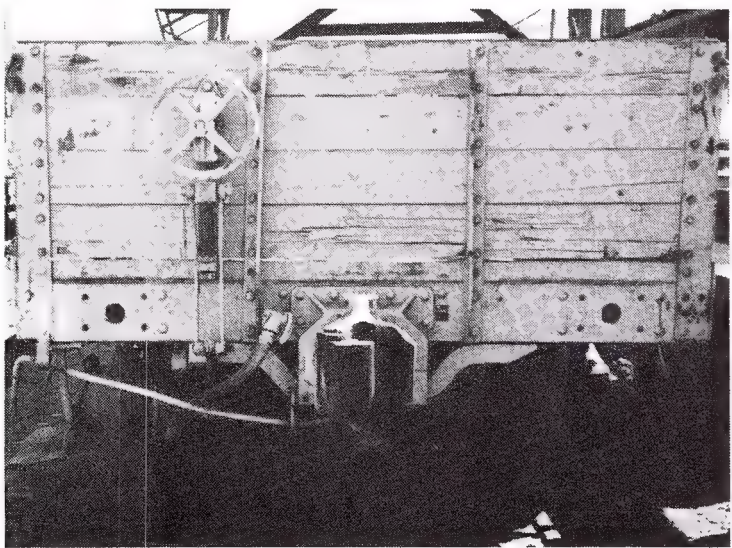




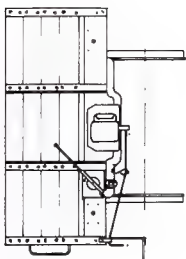
Doorless W4046 and another W with all doors lowered being used to transport pallets of bagged wheat at Wallaroo in December 1972.



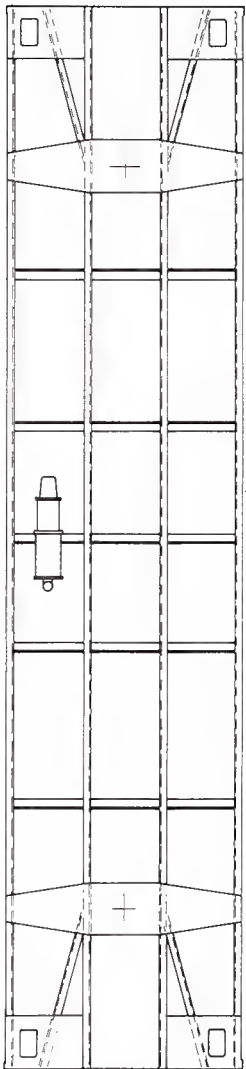
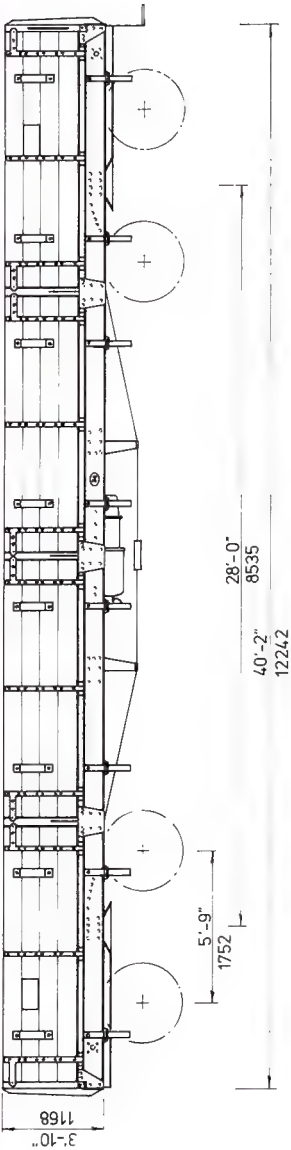
W3144 at Mitcham in 1975. The number 33 in the load was written in yellow which meant the vehicle could be loaded up to 10% above this figure. This practice has now been abandoned and absolute limits are now printed in white.



Handbrake wheel as fitted to one of the W class. Note the hole pattern in the end sill where the buffers had been fitted and that the left hand end is painted white to indicate that this end of the vehicle has the handbrake. Photo taken in 1970.



4 plank, 4 door dropside open wagon
SAR class W
ANR class AOWA
plan by Roger Johnson





As delivered J502 as a compound engine. PTC of NSW photo.

THE Z29 BALDWIN 2-8-0

CONVERSION OF A ROUNDHOUSE LOCO KIT BY DAVE WILSON

In the Spring of 1976 rumours began to circulate that Model Die Casting (Roundhouse) was going to market a Baldwin 2-8-0 and a 2-6-0 in its Old Time series kits. Initial advertisements showed only prototype photographs, but one intended model seemed close enough to the Z29 (J483) to make me interested. Correspondence with MDC produced drawings and photographs of the intended model. It was obvious a lot of modifications would be required, so my misgivings and the high local price deferred the project. In January this year, a friend picked up a 2-8-0 for me on sale in the U.S.A., so interested was renewed.

The Z29 (J483) class were the sixth class of Baldwin locomotives on the system and were a 2-8-0 freight version of the Z23 (0446) 4-6-0 introduced earlier in the same year of 1891.

A total of twenty were delivered, and numbered 483 to 502 (2901 to 2920). Two of these (501 and 502) were Vauclain 4 cylinder compounds, with a low pressure cylinder mounted above each high pressure cylinder. From the builders' numbers, these were probably left over from a previous order and the NSWRR persuaded to accept them. They were converted to simple engines in 1896.

By 1910 most locomotives appear to have

received new standard chimneys. Between 1916 and 1920, six locomotives were super heated and received new cylinders with outside steam pipes (2904, 2908, 2910, 2914, 2916, 2918). One of these, 2904 (J486) was fitted with Southern valve gear when rebuilt, as a trial for the forthcoming D55 (K1353) class. Only 13 remained in service by 1920, the remaining unrebuilt engines lasted in service until 1926 (2906 and 2907) and 1928 (2902), although all were held in store until 1926. The rebuilt engines were withdrawn between 1931 and 1935 but were held until the end of 1937.

So far the project has developed into a fair comparison to a Z29, although I still intend replacing the original cylinders with the rebuilt type and doing further work on the tender. The following are the major modifications made to the kit to produce 2908.

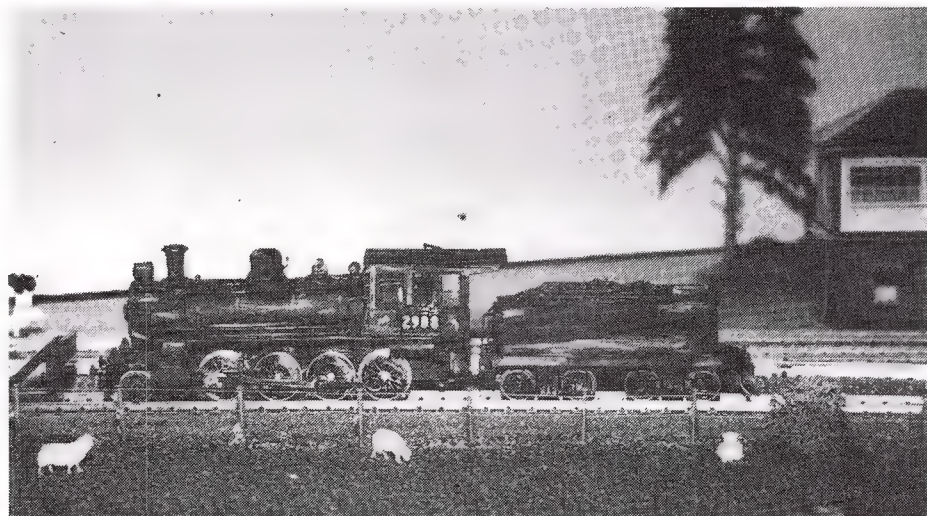
Chassis

Very little needs to be done to the underframe; which is all to the good as I dislike messing with the running gear too much as minor errors can lead to a rough model. The pilot/cowcatcher need to be removed before assembly. Next paint the

underframe, cylinder and lead truck parts black. The motor, gear and wheels can now be assembled as per instructions. I chose to retain the original cylinder rather than try to find the appropriate rebuilt set at this stage. The cylinder sides were filed flat to represent the modifications made to the prototype for platform clearances. The lead wheels supplied were placed in my spares box and a pair of Romford 9mm. (2ft. 7in.) spoked wheels with Eames axle and bush used as a more realistic replacement. A buffer beam was constructed of balsa wood and fitted with a pair of old Tri-ang buffers, an old Airfix coupler hook and a pair of shaped brass strips for a cowcatcher. A pair of British style marker lights were jewelled and added above the buffers.

Boiler

The first step with the boiler was to obtain resin castings of the steam dome and firebox end. Difficulty was experienced removing the moulded steam and sand domes as they each have a cast metal centre; however their positions on the boiler were eventually sanded away. The base of the cast steam dome was then sanded to the necessary shape and the new dome positioned on the boiler, approximately mid way between the original domes. I preferred the standard chimney which seems to have been fitted around the turn of the century, some time before the cylinder rebuild. The chimney was requisitioned from an outstanding Aussie kits D53. (Very handy at the time, but I will have to contact Eames for a replacement at a future date.) Whistle, pop valves and generator are supplied with the kit. The headlight is as supplied; part of the "modern moulding" with the wing number boards carved off. The round number board was used in the Smokebox door, other holes in the smokebox front being filled. Two large air tanks were cut down to 3ft. 9in. long and placed under the cab position, under the rear running boards. The central and front running boards on the right hand side were carved off and a section used to fill the space on the left hand side to provide a continuous long running board. A new running board for the right hand side was made from card. The supplied air compressor



was cut to form a single-phase unit and added to the right hand side running board in front of the cab position.

Next, handrails were fitted using the stanchion positions along the boiler then being bent down to the lower positions along the smokebox. Unwanted handrail nipples were then carved off and holes filled. Solder and brass wire were used to simulate boiler pipework. Photographs were very useful here as each locomotive differed slightly in this respect. Care was needed to attach the smokebox support rods to the smokebox only, to enable the boiler and chassis to be separated.

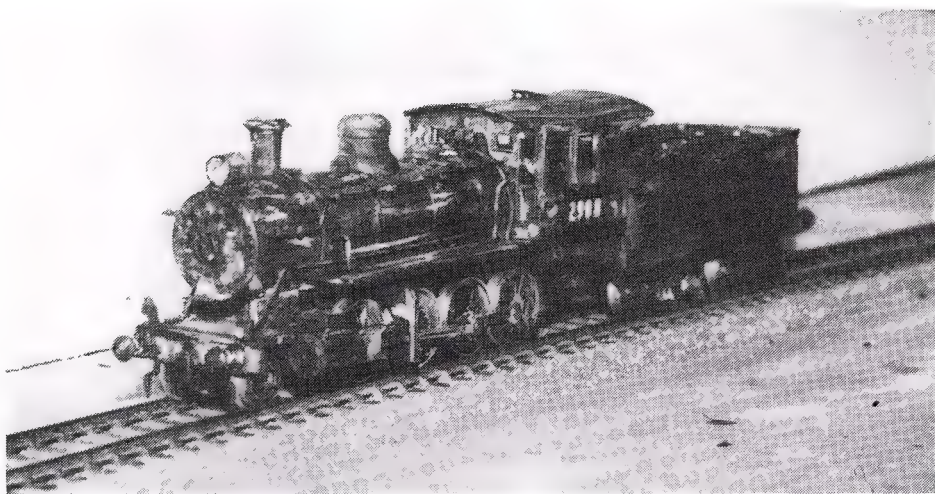
Cab

The cab required for a Z29 is 1 foot longer than the type supplied. This is useful as the longer cab helps fill the gap between locomotive and tender using the drawbar supplied. First step is to remove the framing inside the front window. A sharp knife was used to cut the cab cleanly in half, behind the central window pillar. Next a new card roof was fabricated one foot longer than the old. The cab halves were cemented to it, with one foot gap, and then the sides and ends of the card trimmed to the correct profile to match the old roof. Similarly, two cab sides were cut from card and cemented across the gap. Window pillars were made from balsa wood and placed mid way along the large window to form a total of three windows. Card was used to fill in the underframe profile behind the existing underframe and supply a cab floor for the empty foot, thus removing an unsightly gap. The supplied vent was added to the cab roof. After painting and weathering the cab and boiler were joined with the screw supplied. The front and rear cab windows were then glazed and the driver added to the right hand side of the cab against the firebox.

Tender

The supplied tender cannot easily be made into a replica of those used with the Z29 so a compromise in style was struck for the time being. The chassis was assembled as supplied to enable testing and operation of the model. The following parts were removed with a sharp knife

1. Steps at rear of tender



2. All the plates along the sides and rear of the bunker

3. The wooden slats inside the coal space. The coal space was sealed at the front with a 2ft. high plate (card) and a floor cut to raise the floor to this new height. The enclosed space extends the water capacity of the tender. The top of the tender was then boxed in with card at the rear (sloping outwards) and the front was edged with coal rails of thin brass strip. Wooden strips were placed across the coal space to retain the coal. The rear buffer beam was then drilled to take a pair of old Triang buffers. The tender was then painted matt black and weathered. A small, stiff mix of plaster was made and poured into the coal space and liberally sprinkled with Campbell's scale coal whilst wet. Further coal was added with glue once the first batch had set. Realistic spills occurred into the rear tender top and onto the footplate.

extending the firebox back to the rear of the new cab once I have a good resin casting of the firebox rear. This will avoid the need to carve off the existing details and trying to relocate them. A fireman or two still need to be added, and perhaps improved location of boiler pipework. I intend checking out Roundhouse's more modern cylinder types to see if I can fit a set of "rebuilt" cylinders to 2908.

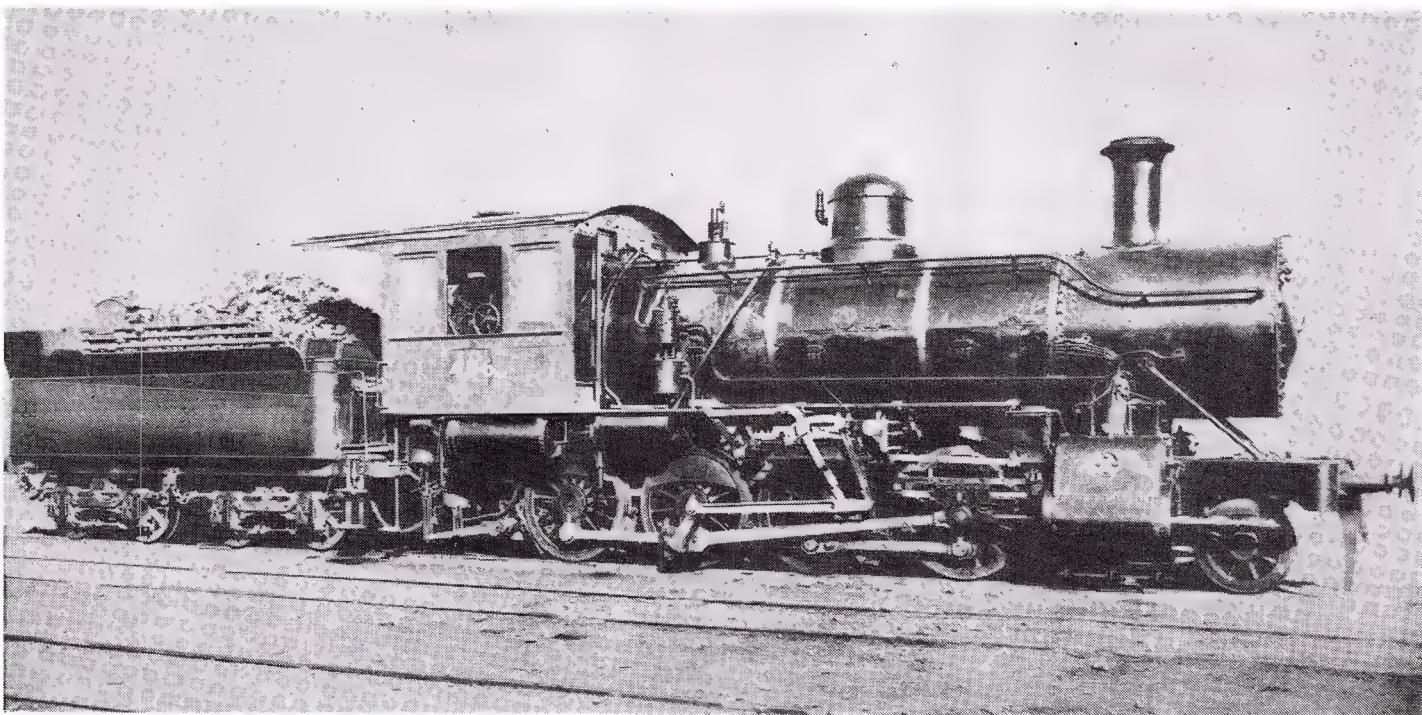
Hauling performance is not as good as expected at this stage, but has improved slightly with running-in. The lead truck has problems derailing on sharp reverse curves. I cemented a rim of perspex on the insulated lead wheel to avoid shorting against the cylinders on sharp curves.

References

1. NSW archives plan No. 42 for Z29 (J483) for general outline, with grateful acknowledgement to Mr. Ben Hafey.
2. NSWPTC book "Steam Locomotive data" July 1974 edition to enable choice of model to build for period of operation.
3. "Locomotives of Australia" by Leon Oberg.
4. "A Century Plus of Locomotives" by ARHS
5. "Locomotives beyond recall" by NSW Rail Transport Museum.

Future Improvements

The model is not yet completed (What ever is?). I had to write off to Roundhouse for some missing parts, two crosshead guides and a connecting rod. The tender I am still not satisfied with; I have not yet located views of a Z29 tender from the rear whilst attached to a Z29, also a tool box has to be added. I intend



In 1916 six of the 'J' (Z29) class were fitted with superheaters, piston valves and larger cylinders. No. 486 was also fitted with Southern valvegear (instead of Stephenson motion), as an experiment prior to the introduction of what was to be known as the D55 class. PTC of NSW photo.

Murwillumbah....A modelling proposition

by Phil Flynn

Murwillumbah Railway Station is located some 960 km north of Sydney. It is the terminus point of the line from Casino, which is on the main northern line. The branch line passes through Lismore, Byron Bay, and onto Murwillumbah.

The Murwillumbah Railway Station and goods sidings could make for some interesting modelling. Examine the track plan. The number of industries which the sidings serve illustrate this, and more will be said on this later.

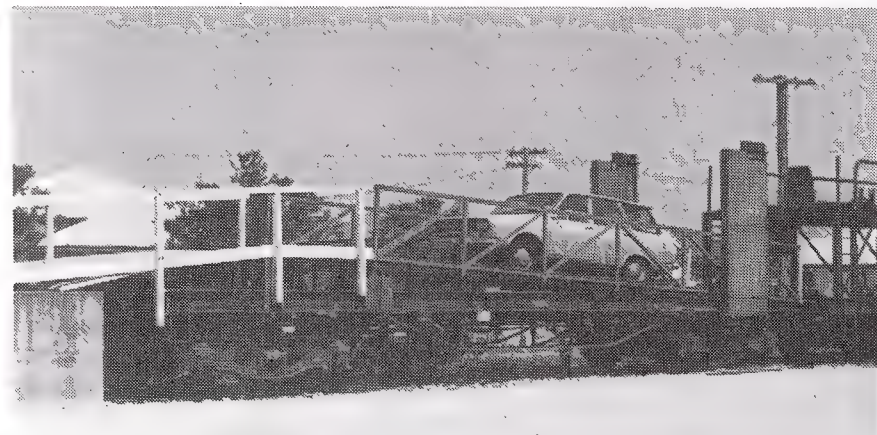
Murwillumbah is served by a daily passenger service in the form of the Gold Coast Motor Rail. It arrives at Murwillumbah at 11.10 a.m. and departs at 3.25 p.m. each day. The passenger consist is headed by two Class 44's or two 442's. The load consists of (from the Sydney end) MHO, ODS, ODS, ABS, ODS, SBS, LAN, LAN, LAN, a Power Van and MR, MR. The MHO is the guards van; ODS are the second class sitting cars; ABS is the dining car; SBS first class sitting; LAN silver sleeping cars and the MR cars are car-carrying vehicles. For details of these cars see the photographs.

Upon arrival in Murwillumbah the MR cars are pulled off by the 44's or 442's and then the 44 or 442, which brought the early morning goods (4 a.m.), shunts the MR's into the siding to be unloaded. The 44's or 442's then make three shunts to unload passengers and parcels, as the station is not long enough to unload the whole train at once. The MR's are once again loaded in the afternoon for the UP Gold Coast Motorrail, but the 44 usually shunts the cars behind the train and the main consist is shunted back to the MR's and these are connected. Three shunts are required for passenger loading again.

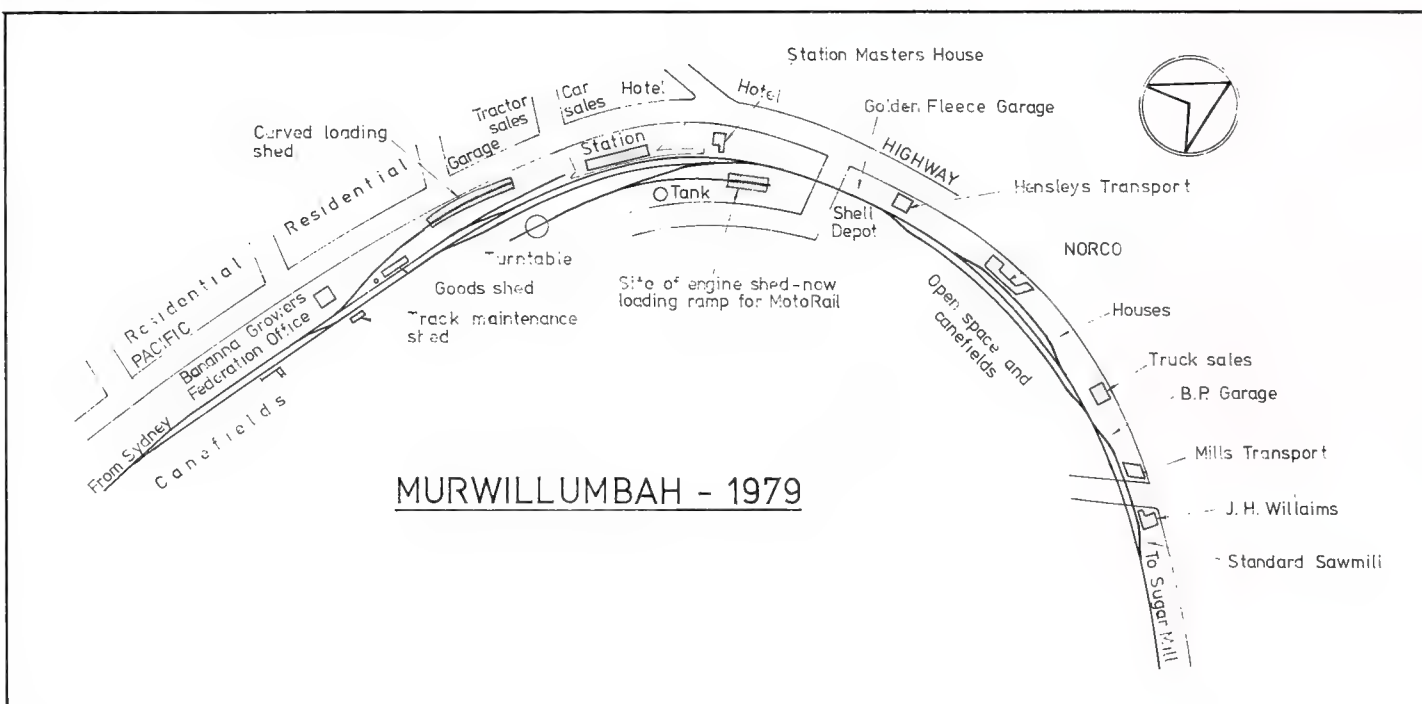
The UP goods is made up after the departure of the Motorail by the remaining 44 or 442. It is mainly composed of covered wagons carrying bananas (JLX, LLV) with different types of guards vans (MHG, JHG, FHG, GHG). These are loaded on the sidings south of the station. Other wagons may include KLY container flats with RACE containers, CDY's and BDL's, although



Murwillumbah railway station.



Motor vehicles being unloaded from the lower deck of the 'MBY'.
Note the use of the old rolling stock underframe as a basis for the ramp.
Bob Gallagher photo.





A busy Saturday afternoon in Murwillumbah. The UP Gold Coast Motorail is awaiting departure while the 44 class in the background has just completed the task of assisting to add the 'MBYs' (car carriers) to the end of the express. Note the turntable in the foreground and the now disused round brick water tank in the background.

others have been observed. These are loaded at a number of the lineside industries north of the station. Other wagons observed have included liquid fertilizer wagons, VLX, ELX, and BCW. The goods train departs at around 9.00 p.m. each week day.

The DOWN goods arrives at 4 a.m. The wagons for the loading of bananas are shunted under the curved covered siding south of the station and others onto the various other sidings north and south of the station. The DOWN goods locomotive then sits on the turntable siding waiting for the DOWN Motorail.

Industries north of the station are varied and could make for some interesting modelling and some interesting shunting operations. Examine the plan of the sidings and not only are bananas and general goods loaded south of the station, but general goods at Hensley's Transport, milk at the Norco Milk Factory (which now only processes local milk), fertilizers and agricultural products at J.H. Williams warehouse, and other general products



The NORCO factory siding. Note the use of milk churns.



These two photographs show the covered goods shed used for the all-weather loading of bananas and other perishable goods loads.

AMRM NEWS

Those of us at AMRM who give our time and effort preparing AMRM for publication gain satisfaction in varying ways; some by simply completing what can at times be tedious tasks and others by the sight of the published work within the magazine. We are aware of reader satisfaction by our increasing circulation and from the letters and notes we receive from pleased readers. We do receive a sometimes necessary moral boost from these letters and we often are amused by the attempts of some readers to (often unfairly) criticise and belittle individual AMRM staff members and authors. It is all the more amusing when the reader (in his letter), because of his clouded view on a subject, makes errors as large as those he is criticising.

However we are not amused when, after many hours of work on an issue (and a speedy job from our printer) we manage to get the finished product to our outlets a week early but find that the subscribers copies arrive over two weeks later. We are not satisfied and will not tolerate the circumstances under which the mix-up arose.

We have been able to pinpoint where the major delay occurred and have made steps (once again) to eliminate this apparent lack of concern by our mailing contractor, but we will not be able to speed up the further delay that added a week to the postal distribution of the September/October issue, for although it took over a week for the copies to travel from the Redfern exchange to Sydney addresses (during federal election mail-out periods) the postal authorities denied any delays.

We trust subscribers will bear with us while we sort out this problem. It has happened before, and we were guaranteed it would not happen again. It has, so now for the future.

Who was first?

There is apparently still a little confusion as to who was the first to release injection moulded kits, so here are a few dates and qualifications, especially for those who must be accurate.

Bergs 'S' wagon became available in limited numbers on July 23, 1980 when a small advance shipment arrived, and quickly sold out. TRAX 'LCH' kit became available at some outlets on August 9, 1980.

So, from the above, it is easy to see that Berg's were first in the race, but as their 'S' wagon was made in Wales, and the 'LCH' in Sydney it can be truthfully said that TRAX produced the "first Australian made injection moulded styrene kit for the local HO market" . . . as long as one does not count any of the components made with injected styrene by Roy Hill or PMH or any of the backyard projects that have been rumoured, but not sighted.

The N scale 'ELX' by Fybren Models became available the first week in October, and this could be classed as a first . . . as long as the Sentinel N scale C38 tender, which was injected moulded styrene, was not counted.

The argument is purely academic and that is why last issue, we kept the issue low key, and to the Review section.

Something New

The Sydney Model Railway Exhibition is usually noted for adding something new (each year) to the hobby and this year promised to be the best, for numerous manufacturers planned to release new models. History will have it that all failed to meet the deadline except the Friedmont 'O' class tram and a sample of Berg's 'TRC'. Local modellers should not have been disappointed however, for the 1980 exhibition saw the introduction of the 'Wells Street' layout, built by Ken and Geoff Richardson.

As built it would be the ideal layout to infuriate the point-to-point layout purist, for Wells Street portrays that section of track between the Cleveland Street Bridge and Redfern station bridge, and consists of at least 13 circles of track. That's right up to 13 (or even more if our counting was wrong) trains can be run at once on the layout. Although it is still in its infancy and a little raw in spots it was a refreshing change in local prototype exhibition layouts for, apart from the novel (numerous) circles of track, it is the first exhibition layout of note that has moved away from the multi-piece diorama style made popular by the Menangle layout.

Continued on page 48



Goods shed.

behind Mill's Transport.

Further north of these sidings the line runs through Standard Sawmill, and three kilometres further north along the single line is the North Coast Cane-growers Co-operative Sugar Mill, previously owned by C.S.R. Ltd. Sugar cane, cut near a small town named Mooball south of Murwillumbah, until a few years ago was brought by rail to the mill. As well, timber is not loaded onto or off cars at the sawmill, but both industries could provide added interest to a layout based on Murwillumbah Station.

Other locomotives and railway vehicles which could be used on a layout have been observed at Murwillumbah. These include a 48 Class heading a weedicide consist (weedicide tanker, S wagon and MHG); a 48

Class and a 45 Class have both worked the goods train (but not regularly), and a consist of ballast wagons.

If a reader was interested in modelling in the steam era D50, C32, C30T and Z17 class locomotives were used to haul trains in earlier years. These trains included a Fast Fruit Express, the North Coast Mail, a slow passenger train and mixed goods. Some of these were used to convey school children between Mullumbimby and Murwillumbah.

As there has been talk of closing the line recently, and also previously of placing a freight terminal at Murwillumbah, there was a need to put pen to paper to record details of the present operations and some of the past. I hope this article proves useful to modellers.



Banana Growers Federation office and fertiliser shed.

THE BANANA TRAFFIC

A FEW NOTES...

Mention of bananas lead us to Geoff Smith who has close contact with the transport of this fruit.

The Banana Growers Federation arranges transport of much of the banana crop from the growers to the rail loading shed. The crates or cartons of bananas are usually packed on pallets which require a fork lift truck for unloading however some cartons are carried loose.

Trains carrying bananas are labelled by the B.G.F. with a combination of numeral and letter, for instance 2A is the first train of the second week in January. Each week there are three departures. Train A is loaded on Monday, B is loaded on Tuesday and Wednesday with C loaded on Friday. The wagons go to Newcastle, Sydney with road delivery to Wollongong etc, Melbourne and Adelaide.

Let's look at two examples. In 1980 train 2A had six trucks (IN, 2S,2M,1A) train 2B had eight trucks (IN, 3S,3M,1A) while 2C had thirteen (IN, 5S,5M,2A). This is fairly typical

of the peak season traffic which this year was early October to late February and at 40 tons per wagon that is a lot of bananas. In contrast week 26 is the off peak banana season however perishable loads such as avocados, passion fruit, beans and tomatoes are loaded into refrigerated RACE containers for Sydney and Melbourne markets. In 1979 train 26A had nine trucks, 26B had eleven while 26C had eleven also and of this tonnage about half would be bananas. The perishables grow in a fairly limited area however bananas grow more widely therefore the peak to off peak comparison is more obvious farther down the line.

Inward loading to the B.G.F. includes backloading of empty pallets in louvre vans and super phosphate in BDX type open wagons.

The Agent in Adelaide has an unloading siding within the Mile End Goods Yard so the Adelaide bound louvre van goes via Broken Hill or Melbourne either next to the engine or immediately behind the TNT containers.

MAIL BAG

Sir,

I think all modellers must firstly congratulate the Staff on the high standard of this magazine. At \$1.20 it is still the greatest bargain on the market. Don't apologise for price increases, inflation is not your fault, and the magazine seems better each issue. As has been said before, we the average modeller or muddler must support the magazine not only by buying it, but also by contributing. Our modelling skills may not win competitions and our layouts may not match some we see in this magazine, or at exhibitions, but if we are active in the hobby we must have some idea worth sharing. Even a Letter to the Editor gives the staff more material from which to select. I hope other members of the silent majority may be stirred into action and embarrass the staff with a profusion of material.

Next, we average modellers must also congratulate all of the manufacturers for their current efforts. The prospects for the average modeller have never been so good. Friedmont is a name which has been widely discussed in these pages in the past. I have had all of the disappointments mentioned too. However the sidings on my layout would not be as full, and the rear of the goods trains would be somewhat lacking. Where would the guard be? I'm sure that Friedmont's 48/830 kit will be reviewed in these pages. I would like to say that although I haven't finished counting all of the rivets yet, it is extremely well thought out and of a high standard of finish. There can be no excuse for not running several of these, unless you already have half a dozen brass ones. It is an excellent kit and all of the components are included to model the various options seen on the prototype. I suggest the purchase of the Data Sheet to clarify some of these variations. For those modellers who hesitate at cutting drive shafts, or are not happy with the Mehano mechanism recommended, you may be interested to know that Tyco mechanisms will fit very easily. The bogies of these locos clip onto a retaining bracket, which in turn has lugs which slot into the diesel shell. To fit to the 48 all that is required is to cut off these lugs, file off any flash, and the brackets and bogies will drop in. It's a good tight fit and they will stay there without any further work. The springs between the bogie and the bracket aid the loco's tracking, but makes it sit too high. I've taken them out, and it seems to be alright. They may be able to be cut in half as a compromise. I added a small weight inside the shell between the bogies.

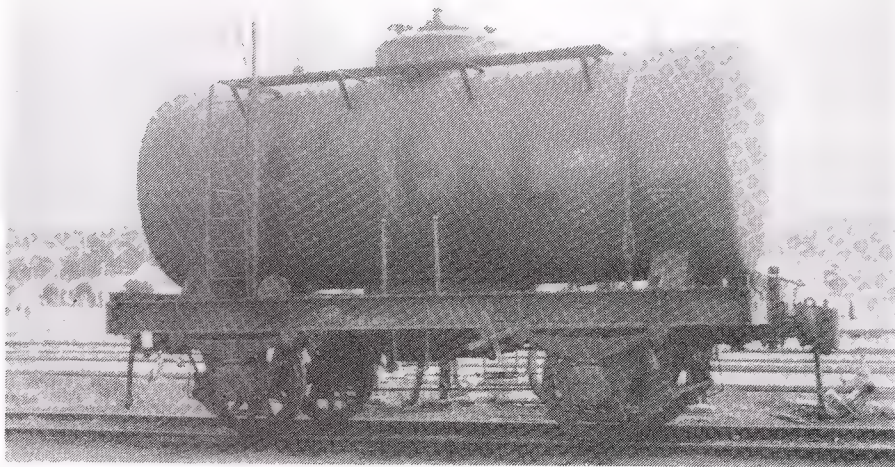
Now that I have publicly admitted to using a Tyco mechanism, I guess that some people will turn up their noses in horror. Worse is yet to come. The Tyco diesel used was "She'll Be Coming Round The Mountain", complete with GM bogies. I hope to replace these in the future. Possibly buy a second engine and double power it. This would be a simple process also. Slip the dummy bogie out and fit the second one and solder one wire. At the time of writing the 48 is in a black undercoat, but it is a surprisingly good performer. It will shunt fairly slowly and pull a respectable load as well as being capable of at least 200 mph. As soon as it is painted and lined I will be buying more. There were no air bubbles, broken bits, and it has good uniform thickness. Congratulations to Friedmont for producing a most needed model.

Similar praise must also go to all of the other manufacturers mentioned in the Sept/Oct magazine. It is much easier to run a variety of locos and rolling stock now than it was a few years ago. It will only improve if we buy these models now they are available. The new Lima Carriages certainly look as though they will be worth the wait. It's time for us to pay up and really get behind the hobby. The hobby has come a long way in the last few years. I think this magazine must take much of the credit for this happening. I think we can look to the future with confidence, provided we are all willing to get involved.

Lloyd Batten
Glenfield, 2167.

Sir,

May I be permitted to point out an error in Howard Armstrong's plan of the 4 wheel tanker in the September/October 1980 issue of AMRM. The solebars of these vehicles is 12 inches high, not 9 inches as shown. I measured the vehicle in December 1969 in Cooma yard, and with the exception of the solebars it was identical to a standard 18" underframe. The tank itself was painted yellow with the lettering



'SHELL' in red. The number 34 on the end was in red outlined in white.

I first encountered one of these tankers in 1956 in a train at Bargo. It was then virtually identical except it still had buffers and the red 'SHELL' lettering had white surroundings.

I have included a photograph of Shell 34 in yellow for the benefit of readers.

Fred Schmidt
Canberra. 2600

Sir,

The article on building a 43 class loco was very good. I noticed a slight mistake which could be fixed very easily. This was in the bogies of the 43, the brake cylinders are opposite to the 44's bogies. The brake cylinders are differently placed. On the leading bogie two face towards No 2 end and one faces towards No 1 end. On the trailing bogie two face towards No 1 end and one towards No 2 end. On a 43 two face No 1 end and one faces No 2 end (leading bogie), two face No 2 end and one faces No 1 end (trailing bogie). To change the bogie sideframes involves unscrewing the sideframes from the chassis turning them around and cutting off couplings (motorised bogie). With the other bogie you have to unclip the clip inside the body and turn around.

Peter Williams,
Westmead. 2145.

Sir,

Since the day I first received your publication I have been an avid reader. Simply an armchair modeller, I have eagerly awaited each and every copy of your magazine to arrive at my home through the post.

The whole magazine in its layout, format, advertisements, reviews, special articles, etc. are all fantastic. Why fantastic? Because this magazine to me is unique. In the time I've been a reader and collector I've seen it grow to its present level, getting better and better, yet still the product of the everyday modeller. Not by some organisation cashing in on a trend, but by a "family" of people who share a hobby that quite often is looked down upon by outsiders, who think it's silly and childish to play trains.

So why do we argue amongst ourselves? Plastic or brass, Hornby or Athearn, does it matter? Can't we all share and delight in those wonderful things that run on rails, no matter what they are, who made them and what they're made of.

To me anyway, this magazine is written, produced and published by a few keen and proud railway modellers for a whole family of Australian railway modellers to enjoy and share ... am I right? Through this magazine we can contact each other, show our accomplishments, share our problems, keep up with the latest, buy and sell, learn different methods and "encourage" one another. The list goes on and on.

The magazine has reached and gone past 100 issues and that's no mean feat. It was good to see colour photos. Truly a credit to all those who contributed. And now there's something that I hope will never stop and that is those little "moon faced" guys who have kept me laughing for weeks with captions like "N scale sheep be blowed, they are white ants" and "for complete protection, rub compound under arms daily". You know the ones.

This magazine needs and deserves all the support and loyalty they can get and so although I have been quiet in the past, I shall give it all the support I can. I hope others who "depend" on it bi-monthly will also be prepared to do the same.

So congratulations to all the AMRM staff, thank you for your efforts which have been terrific. Thank you contributors for your help and last but not least thank you to each and every buyer of this magazine. We all share in this.

Now since I reside in Collie, if there is any Collie

person who reads this magazine and is interested in model railways give me a call on 34 2540 or drop in at 11 Patterson St, Collie. Also I would like to hear from anybody in WA who models WAGR in HO or N scales. Please write.

Phillip Sara,
Collie. WA.

Sir,

I am writing to support your stand taken in the September/October AMRM News with regard to the brass 43 class model imported by Mansfield Hobbies being sold out.

The model 43 class was advertised in the May/June and July/August AMRM. Surely readers who were then interested could have made a phone call to Mansfield Hobbies and followed up with a cheque confirming a lay-by.

It is onerous to expect the importer to order far more models than they have firm orders for. It is up to us as modellers to make a financial commitment with the reputable importers prior to the models being imported into Australia.

Bob Gibson,
Hornsby. 2077.

Sir,

I, like several other readers in May/June Mailbag, am a "new chum" to serious railway modelling and although I have learned a great deal over the last twelve months, many mundane terms, abbreviations (e.g. MRC, PMH) and techniques elude me.

Living in the country and having no hobby shops near at hand, most of my purchases every month have to be made by mail. My problem is although the advertisers in AMRM that I have contacted are helpful I still do not know where I can get many items I would like.

The article in March/April "Build a BPV" by Roger Johnson was very good and very helpful.

Can we have a regular small section for the novice, because I ask how can we become efficient if all articles are written in terms and assumptions that only the expert can follow.

Also could any articles give some indication where the materials, etc can be purchased.

Thanking you for a well informed and enjoyable well presented magazine.

Alan Harvey,
Lxton. 5333.

Sir,

Without wishing to go into the merits of having at exhibitions static displays as opposed to operating layout which has over the years seen much comment in "AMRM", might I through this column suggest to the organisers of the larger exhibitions in each state e.g. AMRA, Chatswood and etc. in NSW that whilst one of the main aims of the exhibitions is to get the public inside and make money, how about for a change at such an exhibition, set up provision for a static display where some of our more experienced modellers could be invited to display their models, or other modellers their collections. Over the years through your magazine we have seen photos of the work of these modellers, but this is not the same as seeing the model itself. I can appreciate that there would be many problems associated with such a display — adequately lit security, show cases, transport and insurance etc. but I personally feel that such a display properly handled and displayed could or should become the star attraction for those exhibitions and would be an added incentive to those of us who turn up each year to support the exhibitions.

Neil R. Cram,
Penrith.

REVIEWS

Milk cans in N scale by Period Miniatures. Samples supplied by McBees Hobby Centre, PO Box 144, Coburg 3058. Price: \$1.40 per packet of eight.

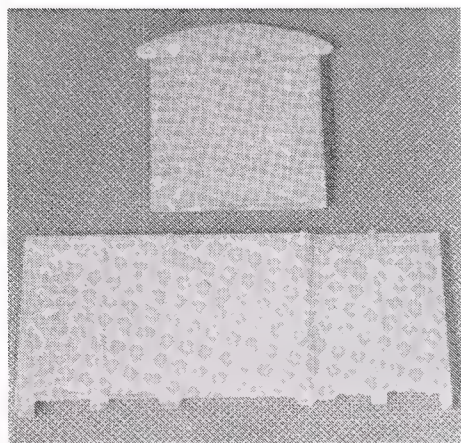
Scenic detail is a basic requirement for enhancing a layout of any scale and as N scale grows so does the commercial supplies aimed at the more serious modeller. Period Miniatures are now supplying detail parts cast in white metal (low melt alloy), and the parts are detailed to the same standard equivalent to the best HO scale detail parts.

Milk cans, or churns depending upon where one was raised, were used during the steam era, (prior to the bulk tanker collection) for the carriage of milk from the farm to the milk factory or in some instances direct to the customer. It was not unusual for the milk in the churns to be carried to the delivery point by train; in fact the NSWGR had some LV four wheel vans earmarked for milk collection and delivery. The Liverpool to Campbelltown passenger trains were just one that had the task of picking up the milk cans from the platforms along the line and delivering the milk to the milk depot (Campbelltown), but modern road transport has eliminated this task from the rail system.

As supplied from Period Miniatures (eight to a pack) in a poly pack with card label, the cans are 2 mm in diameter and 4.8 mm high. They have the curved and reducing diameter as per the prototype. The handles and lid lip are evident. Castings are true, detail is sharp and clean-up is minimal. One does not require an eye glass to see the detail.

An example to refute the comment that 'to model N scale you forget the detail'.

Bob Gallagher.



VR "U" wagon body kit in HO scale. Our sample supplied by McBees Hobby Centre, 535 Plenty Rd, East Preston, Vic. Price: \$1.50.

This kit is of the "U" wagon and is similar in many respects (prototypically and model-wise) to the "U" reviewed in the July/August, 79 issue of AMRM. Once again it is a body kit only, moulded in a bright red polyester resin.

The quality of the two sides and two ends, the sole components of the kit, are well detailed, emanating from what must be an equally good master pattern. Overall dimensions of the body when assembled are mm long, mm wide and mm high. All in all, relatively close to correct dimensions. Instructions, though none are adequate.

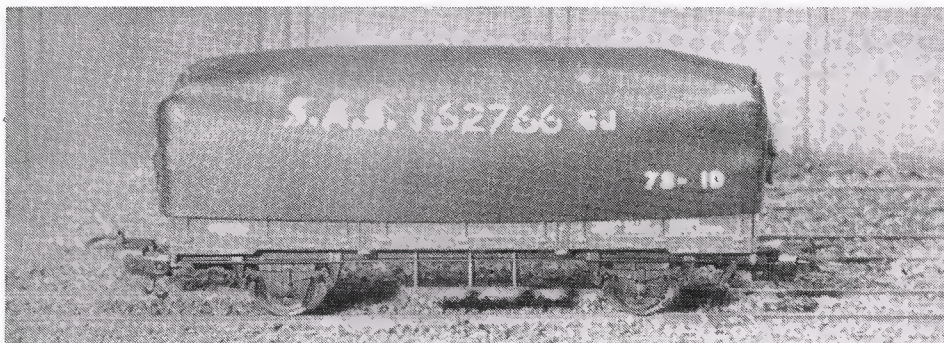
As stated, only the sides and ends are provided, the modeller must provide the rest himself (i.e. roofing material, flooring, axle boxes, wheels, couplers, etc). For the modeller who does not have these components on hand this kit could then prove costly.

The kit is basically a means of saving the scratchbuilder the rather arduous task of making sides and ends. If one considers this kit with that in mind its cost is worthwhile. Perhaps the concept of supplying the hardest part *only* is worth pursuing.

Allan Brown

Covered wagon in HO scale by Lima. Sample supplied by Southern Model Supplies, 63 Boothby Street, Panorama, South Australia. Price \$5.25.

Australian railways are not the only little known/modelled systems that LIMA produce models for; the wagon under review was produced for the South African Railway market. It is a steel constructed four wheel open wagon fitted with a tarpaulin. It is 105mm long, 31mm wide and the



wagon sides are 17mm high. The wheelbase is 65mm long and it is fitted with the standard LIMA 11.2mm dia metal wheels with NEM standard flanges.

The wagon is a drop-side vehicle, having three flaps each side, which would drop down leaving only two steel supports. It is of moulded styrene construction and is precoloured red. The lettering is white and apart from the coding (ES190462) which is smudged, is very sharp. The prototype wagon could carry a load of 40,000 kilo or only 35,000 kilo of coal.

The tarpaulin is a preshaped section of grey plastic sheet, held together in shape with metal rivets. When on the wagon the tarp is also supported by a plastic frame moulded to the wagon (which could be cut away if the wagon was to be used as an uncovered wagon. The tarp does not have the loosely hung look.

Overall it is a very nice model. The detail is sharp, clear and of realistic thickness. The wagon sides are only 1.2mm thick which is getting much closer to dead accurate. The Lima horn hook couplers are swivelled off the body to allow for trouble free running on tight curved layouts. Lima product code is 303521. It is encouraging to see what detail Lima can produce on models of the lesser known railways which, like it or not, Australia is, as well as South Africa.

Bob Gallagher.

Zona Saw. Our samples supplied by the importers, Dawn Trading, of Sydney. Available from most hobby shops. Price: around \$3 to \$5.

The Zona saw, like all razor saws, is a small saw designed with the modeller in mind. It is an integral part of the modeller's tool kit.

The review models are in three sizes, ranging from 9" overall to 12". The blades, similarly, are of different size, height and number of teeth per inch. The most commonly used blade size would be about 6" long by 1" high. Each saw contains a wooden handle, is light and compact, and is easily and comfortably used in one hand.

The blade contains very fine teeth which will cut through metal, plastic, timber — and fingers, hence the name razor saw. It is undoubtedly the most widely used tool for cutting track. The blades are replaceable.

As stated, a modeller's tool and one that gets a lot of use.

Allan Brown

VR Standard 4-door goods shed kit in HO scale by Broad Gauge Models, PO Box 136, Boronia 3155, who also supplied the sample. Price: \$16.50 posted.

The goods shed portrayed by this kit is similar to numerous four-door goods sheds that were introduced to the Victorian countryside in the latter part of last century.

The kit, available only from the manufacturers, comprises epoxy castings for the major sections of

the structure, strip wood and plastic rod for detailing and a sheaf of assembly instructions as well as a coloured print of a completed, weathered kit. The castings, made by the open waffer style, are of a special epoxy mix, the completed result being clean, flat, flawless components.

Following the superb instruction leaflet assembly is very straightforward, there being very little pre-assembly component cleaning required. All parts fit neatly and completed joints are hard to find. The completed structure give a fine representation of a corrugated iron structure, the aspect of individually placed sections of iron being evident.

Once the basic kit has been assembled, the advice is to paint and weather the shed prior to adding detail bracing. Painting and weathering hints are included within the instructions. A little patience is required when adding detail, which is a sharp contrast to the assembly of the base structure (which only took a couple of hours). the adding of the doors and the windows is a simple task, for the prepared openings and the castings are neat, faultless fit.

The only component missing from the structure is a corrugated iron water tank and of course the platform on which the shed is to be positioned. Although this is a craftsman kit, this 51'6" by 21' shed (with 7' awnings) is not restricted to the experienced modeller, the design of assembly and instructions eliminating much of the expertise often required to complete such a kit.

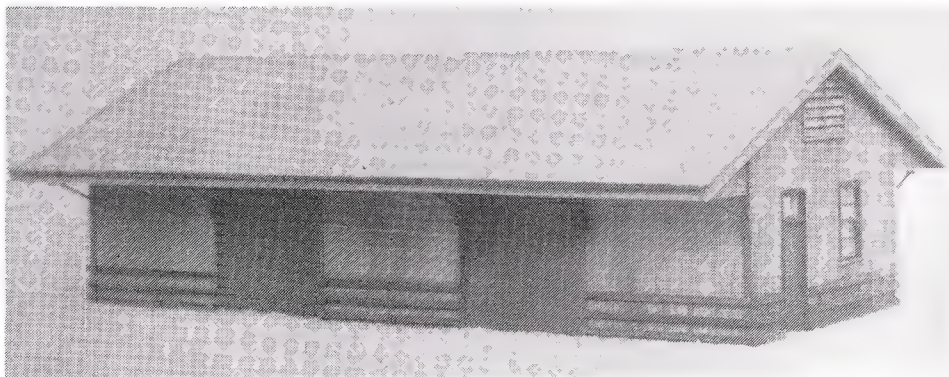
For Australian modellers, especially those in the VR scene, this is a top class kit, by world standard. For those knowledgeable to the American scene this kit is similar to the Magnuson Model kits, only better. It would be doubtful if many modellers could scratch-build a structure as good as this completed kit.

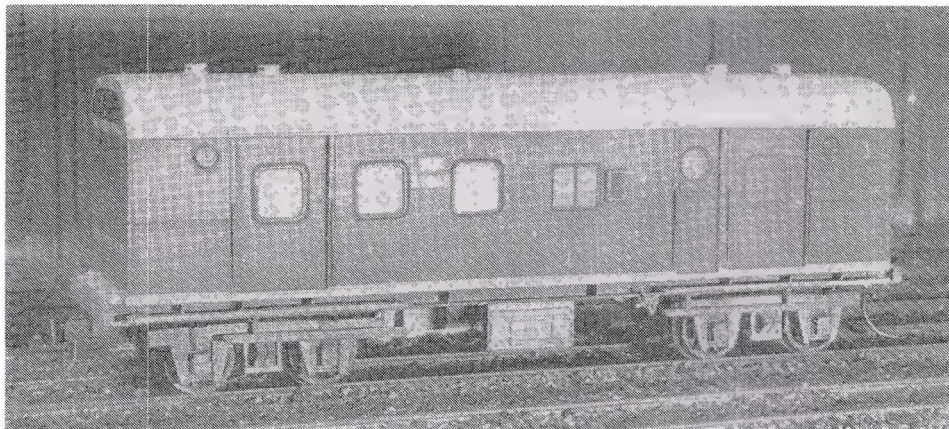
Bob Gallagher

NSWGR/PTC/SRA 'GHG' guards van kit in HO scale by ABL Model Products, PO Box 56, Miller 2168, who also supplied the sample. Price: \$15.00 posted.

The 'GHG' guards van was introduced to the New South Wales rail network in the mid 1960s when the Department began a rebuilding programme using 'LHG' and 'PHG' underframes, rebuilt to the required size. A unique aspect of the van was that it was built from a single sheet of plywood, bent (moulded) around a shaped former. Initially some vans were coded 'OHG' but were later changed to the 'GHG' coding, the main differences with this version being that it did not have the now common extended underframe. Over the years, in varying batches, 180 units have been built, or at least are in service. There are several cosmetic differences between units built in different batches.

This kit was originally produced and marketed by Stephen Johnson early in 1980, but production and marketing has been taken over by ABL Model Products, who have modified some aspects of production. The review will be contained to the kit as now available only from ABL Model Products.





This kit was modelled of dimension and photographs of 'GHG' 31059. It is supplied in a sturdy card box, and the main components are flawless epoxy castings (floor, sides and ends), a timber roof, wire for handrails and white metal castings for bogies, roof vents and underfloor detail (generator, battery box, brake and air receivers and circuit panels). The simple instruction leaflet contains helpful illustrations.

The castings are well detailed and incorporate the cast-in glass for windows. Detail is very sharp and a feature of the kit is the provision of the body supports on the underframe. Assembly is straightforward, and by following the instructions, a neat, square body is possible, the join marks being well camouflaged. The instructions are a little misleading regarding the floor casting which is recessed 1.25mm into the body. The small tits of the body bolster must be removed. Self tapping screws have been supplied for attaching the bogies to the body. While this is an accepted practice, modellers should bear in mind that self tappers and epoxy-polyester castings have not always been a good match, for after the screw has been removed and replaced a few times the screw hole becomes a little loose, as does the bogie. If possible drill and tap the floor for 6 BA screws.

Completed the kit is 126 mm x 31 mm (131.5mm over headstock) while the body is 34.5mm high. Buffers are not provided and the ends of the van are free of detail.

It is necessary to paint the inside of the toilet window prior to fitting the timber roof in place, any gaps being filled with a body putty such as Panel Metal. The remainder of the assembly is very straightforward, the total assembly taking a couple of nights. MGW disc wheels and bearings were fitted into the bogies although the bogies are predrilled for pin point wheels and the bearings are only required by the fastidious modeller.

Completed, this is a fine model, equal to most other kits made by this vacuum/epoxy casting method. It was not too difficult to assemble and as a finished model can be utilised in both modern steam and diesel periods. The prototype was introduced when the red brake van livery was new and most, if not all, 'GHG' vans were/are decked out in red.

Bob Gallagher.

NSWGR "LLV" bogie louvre van. N scale kit in white metal. Our sample supplied by Berg's Hobbies, Church St, Parramatta, NSW. Price: \$8.95.

Following on from their recent release in HO of an LLV (AMRM Mar/April, 80) Berg's Hobbies have also released the same in N scale.

The kit is fairly basic consisting of sides and ends in white metal with roof and floor in aluminium strip. Bronze castings for buffers and underbody detail are provided together with further white metal parts for bolsters and fishbelly underframe. Quality of the parts is quite good. Some moulding lines are evident but are easily cleaned off. Dimensions appear

accurate and the kit goes together quite well. A combination of five-minute and cyano-acrylate glues were used to assemble the kit.

The only problem encountered was with the roof — a flat aluminium strip which is intended to be curved to suit the roof line. It would be possible to substitute other material (as suggested in the review of the HO kit) but I found that with a little care it was possible to shape the roof as required. By placing the strip over the open jaws of a vice and using a suitable diameter length of dowel as a die it is possible to arrive at the right curvature with a few judicious taps of a hammer.

Bogies are not supplied with the kit so the choice is left up to the modeller. Kadee bogies are recommended and it is necessary to remove some material from the end sills to clear the couplers.

My only criticism is that the car is a little top heavy which restricts the length of trains somewhat. Still it's a nice, well detailed model and deserves to sell — we can only hope it's the first of many.

Bill Kerr.

Australian Trees. Our sample supplied by St George Hobbies, 504 Rocky Point Rd, Sans Souci 2219. Price: \$2.75.

These trees are from a new manufacturer to the Australian scene, and are intended to depict representations of our own native species. There are, at this time, four varieties available, namely gum (light trunk), gum (dark trunk), paperbark and wattle. The gums average out at 6" in height and the paperbarks and wattles around 4½".

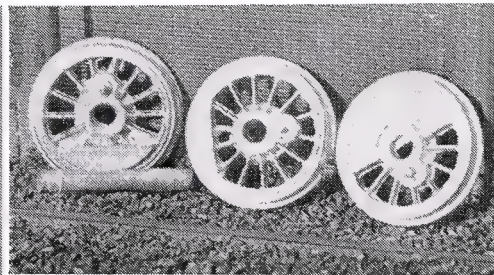
Each tree is made up of a twisted wire skeleton over which a papier mache type of substance has been coated. A nice, rough texture results. This basic trunk/branch/root system is then painted an appropriate colour relative to the type of tree being modelled. The foliage appears to be horse hair or similar and has a good open weave to it. This material is then coated with an adhesive and green sawdust is sprinkled on — or in the case of the wattle, a little yellow is added. Each tree incorporates a pin projection from the base for inserting in pre-drilled holes. Packaging is either one large tree per plastic bag or two smaller ones.

Generally the trees look the part. To some, the foliage may appear too thick and too bright. However, the material in itself allows the modeller to prune and re-colour as required. After all, it is the all important shape that is primary, and that is apparent in these trees. Flexibility of branches allows for further variations. All we need now is a good weeping willow! A good product.

Allan Brown

Scenery detail — HO drivers and axles by Keystone Locomotive Works. Sample supplied by Import Hobbies, 4 Windemere Court, Albany Creek 4035. Price: \$4.55.

A further addition to the range of detailing junk by Keystone. The drivers and axles are metal castings of



14 spoke driving wheels, there being eight in the poly pack and the counterweights varying on each pair of wheels, to indicate that all the wheels could have come off the same locomotive. Detail is sharp but a little flash is evident. Very little work would be required to bring the parts up to 'used' standard. Correct painting and weathering would lift the detail on each part, and the correct placement of rust/grease/dirt upon the parts will enhance the realism that could be created if these parts are correctly placed and scenicked-in. They could be placed up against the loco shed wall, or piled two or three high, or if laid on the ground weeds could be growing through the spokes. The placement and scenery is important to gain the best use of these parts.

Bob Gallagher.

VR 'GY' body kit in HO scale. Sample supplied by Arcade Signal Box, Shop 8, Foleys Mall, 445 Sydney Road, Coburg 3085. Price: \$1.20.

The GY open wagon is Victorian Railways, and any VR modeller who ignored the presence of the 'GY' could be challenged at having a foreign (to VR) layout. A full description of the 'GY' including plan and colour photographs was published in issue 100 of AMRM.

The components of this BODY KIT are the basic parts required to build a HO scale model, but wheels, couplers, floor, underbody detail and grab irons. The parts are polyester castings, supplied as two identical sides, two identical ends and two side sills which include cast-on axle boxes. Overall (assembled) length is 78.5 mm and the sides are 16.4 mm high. It will be necessary to drill the axle holes for the wheels, and care should be exercised to ensure that the holes are in the same position in each of the axle boxes. Very little flash is evident and detail is well defined. The 'pressed' section on the two side doors seem a little too small. The castings are a little sticky and there is some evidence of master pattern flaws being reproduced on the parts in form of material 'runs'.

A kit of components that could form the basis of a good model, depending upon the experience and ability of the modeller. The price of the parts make it a good kit for newcomers to try their hand at kit building.

Bob Gallagher.



Baggage wagon kit in HO scale by Jordan Products. Sample supplied by McBees Hobby Centre, PO Box 144, Coburg 3058. Price: \$2.10.

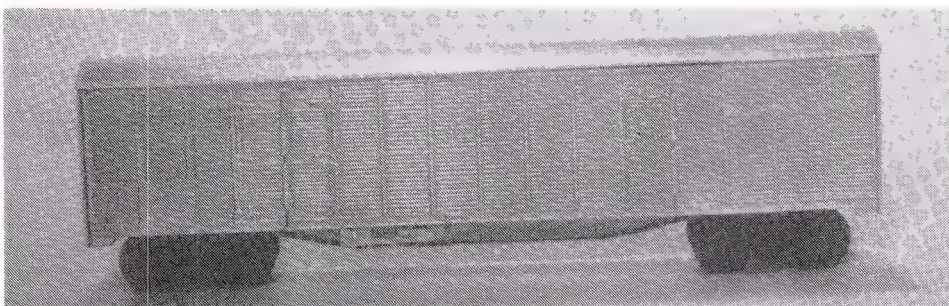
This kit is part of the Highway Miniature range manufactured by Jordan Products. The kit comprises a number of pre-coloured moulding sprues and a detailed, illustrated assembly instruction leaflet.

Assembly is straightforward, after parts have been severed from the sprue and cleaned up with a 2nd cut file. MEK solvent is a handy joining cement. Total assembly time is about half an hour.

The completed model is an American-style baggage wagon, as used to carry passenger luggage on the station platform. While the wagon is not representative of the wagons in use in Australia, it would be a useful addition as platform detail although the colour scheme is a little bright, and a repaint would be necessary.

Bob Gallagher

When writing to dealers, tell them you saw it in AMRM





HO scale NSW 43 class locomotive, by Samhongs. Imported by Mansfield Hobbies, 100 Pacific Highway, Waitara, 2077. Price: \$195.00.

The 43 class diesel electric was manufactured by A. Goninan & Co and introduced to the railway system of New South Wales in 1956, the sixth and last unit of the class being put into service in June 1957. Capable of 71 mph these 1600 HP locomotives were used for both mainline goods and passenger work. By October 1979 all 6 units had been withdrawn from service. (A full prototype coverage of the 43 class can be found in the July/August 1980 issue of AMRM.)

Mansfield Hobbies chose the 43 class as its first venture into the handcrafted brass ready-to-run market. (A wise choice, for the demise of the prototype has made it a very popular locomotive.) Manufactured by the Samhongs Company of Korea, again another first for Australian modellers, this HC scale model consists of a fabricated brass body on a brass chassis, the mechanism (driven A-1-A + A-1-A) is powered from a can motor to white metal power bogies, the latter giving the model much needed weight down low for traction.

The body is etched and crafted to form a good representative of the prototype although the nose is not quite the correct shape. In most instances all added detail is full and fits snugly onto the body, but there is the occasional lapse in detail positioning. A feature of the model is the sprung buffers.

It is a smooth running model, and (comparing it with other brass engines) as an express engine it is a good shunter! Seriously, the top speed seems a little slow for an express engine, but the slow speed and general performance is first rate. Some models seemed to have limited bogie movement, but the restriction (the ladder) can be readily bent a little to allow freer movement.

A very good model, that has discredited the story that brass engines straight out of the box do not run. Another unusual aspect of this model was the presentation. As usual it was packaged in the foam lined coloured card box, but inside the box was a few goodies; performance graph of the motor, an acknowledgement/checked form from Mansfield Hobbies, a coloured print of the prototype in standard livery, a set of decals for the numerals and creast and a plastic bag containing a spare screw for each screw used in the model, as well as a spare universal and a cluster (of two) of horns for adding to the model (in place of the large cluster) so that it can accurately represent 4305 or 4306. In all, very original and impressive.

Bob Gallagher.

SAR 'M' van kit in HO scale by Broad Gauge Bodies (BGB), who supplied the sample. Price: \$5.95.

The 'M' van was issued to traffic in 1925 as part of the Webb rehabilitation programme. The 500 units were numbered 7000 to 7499 and, like many vehicles that saw long service on a rail system, was modified as traffic and maintenance demands were

required. To this end there were three main styles, being — i. plain wooden door; ii. wooden door with top half louvred; and iii. steel door, top half louvred. The roof was either plain metal or corrugated iron. As issued to traffic they were equipped with arch bar bogies, although other styles were and are used. A high speed bogie (similar to Bettendorf) is used on the MRP version, which is used for high speed traffic. Some vans have double floors and are coded MG for beer barrel traffic.

BGB makes both the full timber door and the half louvre door versions, the review being contained to the full timber door version.

Supplied in a poly bag, well wrapped for postage, the kit comprises polyester castings for floor, sides, ends; curved aluminium sheet for the roof; timber for centre sill; wire for grab irons and brake; brass shim for shunters step and decal material for number board.

The polyester castings were clean, flat and clear of any casting flaws. Detail is crisp and most detail appears true (in squareness). There is little flash to clean away and as there is uniform thickness on all castings there is no real need to trim down the thickness of the sides/ends. The floor casting included the brake cylinder and air receiver, as well as body bolsters.

Before assembly the parts were washed in a solution of warm water and detergent (to remove any foreign matter and allow the adhesives a clear go at the joints). Assembly was as per the well informed instruction leaflet (which included assembly diagrams and prototype photographs), and was found to be very simple, with only a little care being exercised when fitting the top edges of the ends to the sides (to get a good roofline it is necessary to fit the curved section of the ends into the sides).

Bogies and couplers are not provided, nor is there any reference to fitting of same, mention in the otherwise superb assembly instructions. Roundhouse Archbar bogies were used and fitted by drilling and tapping 8 BA and using roundhead screws. The tapped thread was not made 'all-the-way' through the floor, and the screw was cut down to the correct length. When the screw was added through the bogie into the floor it tightened-up when it reached the untapped section and will remain a tight fit. Couplers (Kadee 5s) were fixed in place with 10 BA screws, tapped into the floor. It was necessary to remove a little of the end to facilitate the coupler.

The model is well detailed and only the underfloor support struts could be found missing, these being added with 1mm styrene. The model was painted as per the suggestions within the assembly instructions. The decal material supplied (black) will enable suitable number boards being prepared once the correct Letraset (or equivalent) dry transfers can be obtained.

Fully assembled this kit is a good representative of the SAR/ANR 'M' van and is well within accepted dimensional tolerances. Total assembly time was about 4 hours (the biggest time consumer being the glue and paint drying time, although this can be eliminated if two or more similar kits are assembled

at the same time). Assembly is not difficult, and it would be the ideal kit for a raw beginner to start kit assembly on.

In recent times there has been much discussion on the polyester kits, but it would be unfair to address any of the past comments to this kit. It makes a fine model.

Bob Gallagher

Lima 3 dome Tank Car. Sample supplied by Southern Models, Adelaide. Price: \$6.25.

Lima have introduced an American style 3 dome tank car into their range. It is a nicely detailed model with a rivetted tank and its general appearance is similar to the old Crown models. It is presently available with silver body and black underframe and lettered for Exxon the large American company. One departure from the usual Lima practice is the fitting of plastic rather than metal wheels in the Bettendorf bogies.

The vehicle is 41'6" long over headstock, 9'9" wide and the bogie centres is 31'. The tank is 38'3" long and 7'9" in diameter. Although the tank is smaller in diameter than most (standard?) Australian (10,000 gal) tankers it does come close to accurate dimensions for some tankers, especially a 3-dome BP tanker. They would be easy to Australianise, by removal of handrail and ladder, and replacement of a smaller section ladder.

At \$6.25 the model is reflecting the increased cost of plastic made equipment. Nevertheless it is a most useful vehicle offering plenty of scope for alteration if one wishes.

Graham Ahearn.

NSWR modern goods buffers in HO scale. Samples supplied by St George Hobbies, 504 Rocky Point Road, Sans Souci, 2219. Price: \$2.25 per packet of 20.

It was not until the late nineteen sixties that the NSW railway authorities started an intensive campaign to remove buffers from existing rolling stock. Until then all four wheel and most bogie rolling stock had buffers.

Most kits available, did not or do not provide this small but necessary detail item. Most modellers wanting buffers had to make do with escutcheon pins and small pieces of tube, use local but inadequate castings or buffers based on English prototype.

Not any more!

St George Hobbies, have available a turned brass, modern style (parallel shank) buffer. They come 20 to a packet including concise instructions showing where to and how to mount the buffers. Careful scrutiny of the product shows it is an accurate representation of the prototype.

They are easy to mount. I have mounted some on TRAX, ProTYPE, Workshop Five and scratchbuilt rolling stock with no difficulties. The difference in appearance is startline. They add a 'touch of class' or a finished look, and do not buffer lock on 18" radius curves when using Kadee No 5 couplers.

At only \$2.25 for 20, enough for five wagons, this product is a MUST for NSW modellers.

Ian Thorpe.

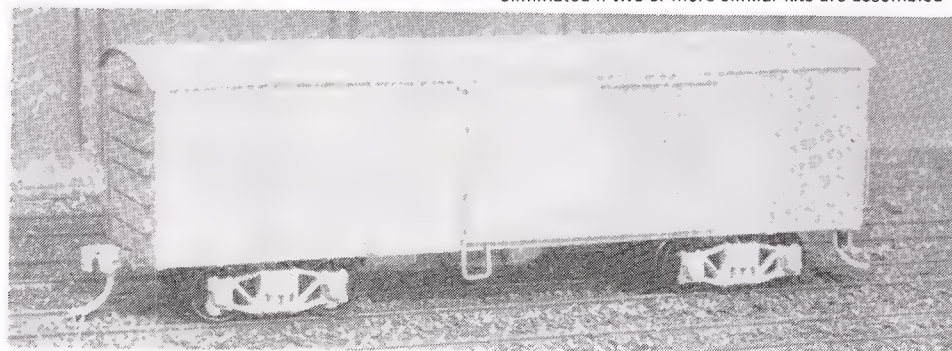
NSWR 'HG' guards van kit in HO scale by Stephen Johnson, 19 Flaherty St, Red Rock, 2460. Price: \$13.50 posted.

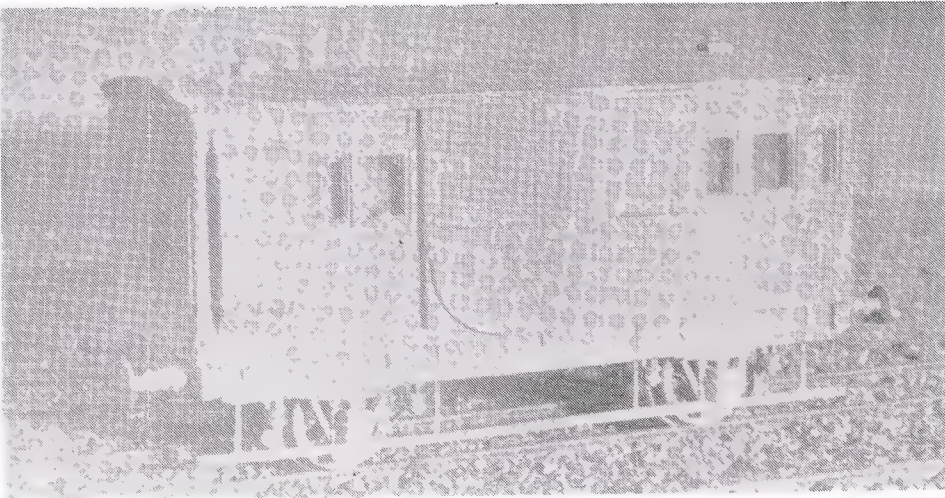
The HG four wheel guards van was introduced to the NSWGR system in the latter stage of the last century (there being 244 listed in 1948) and, although the modernisation programme is virtually complete in 1980, there are still two vans on the register.

The brake van of course is generally the last vehicle on the train and it provides accommodation for the guard. In the case of the HG it also has seating for 5 passengers and can also carry 4 ton of goods. The HG was covered in plan form in the September/October 1967 issue of AMRM (now out of print) while a good photograph was published in the NSW Rail Transport Museum Exhibitions Reports of 1980.

The kit, available only from the manufacturer, comprises epoxy castins, aluminium roof, white metal castings for axle journals, brass buffer heads and wire for handrails, as well as a simple but informative instruction sheet, all packaged in a card box.

The castings are clean of flash and require very little cleaning prior to assembly. The sides feature cast-in glass for windows, a feature pioneered in Australia by Doug Bocking in the Workshop Five Kits. Assembly is straightforward, the components being designed for easy assembly. Super glue can be used to hold the joins until a thin bead of epoxy glue is





NSWR 'HG' by Stephen Johnson.



Lima 3 dome tank wagon.

applied to the inside of the join. The parts fit so neatly it is hard to find exterior joins. The roof is a section of aluminium sheet which is easy to trim to size and bend to shape. Handrails are easy to fit and bend once the correct size hole has been drilled in the pre-marked positions. The curved handrail is easy to shape around a pencil.

The axle boxes are easy to fit in place, and are

predrilled for pin point axles, although pin point (MGV) bearings were fitted and Bergs 10.5mm spoked wheels used on the review sample. Normal fitting of axle journals and bearings allowed for very free rolling wheels. Fitting of buffer heads, brake shoes and steps is straightforward.

The kit is designed for use with three link couplers and if Kadee couplers are to be used a few

modifications will be necessary, apart from fitting the coupler itself. For a start substitute the cast floor with a section of 30 thou. styrene, suitably cut to size and shape. The coupler pocket has been fitted through the buffer beam, and the floor can be built up to support the coupler. (Use a No. 16 to eliminate buffer lock.) The buffers can cause a problem or two for the head is a little too large and the shank a little too long. Both can be reduced in size by holding in a pin vice and electric drill and trimming with a fine file.

This is a very good product, aimed at the period modeller and the fine scale market, but the kit *could* not be classed as too difficult to assemble. As the HG was used up to and after the end of steam operation, the operating scope is very wide. It is a representative of the prototype.

Bob Gallagher.

SOUTHERN CROSS MODEL RAILWAY ASSOCIATION

Secretary: Trevor Moore.
Membership Enquiries:
PO Box 317,
Epping, NSW 2121.

The annual membership fee for the SCMRA is \$10 from March to February and \$6 Joining Fee.

Membership entitles you to participate in the activities of the Association, to receive AMRM, and our newsheet *Booster*. Standards, Recommended Practices and Information Sheets covering model railway practice are included in the joining kit together with a vinyl ring binder and are also issued at regular intervals.

For further details write to the secretary or contact the divisional representative.

Meetings are usually organised on the second Saturday on each month in New South Wales, Victoria and Queensland. For further details and location please contact the divisional representative.

DIVISIONAL REPRESENTATIVES:

Queensland:

Barry Turner,
15 Aberfoyle St,
Kenmore 4069.
Ph: (07) 378 7683.

New South Wales:

George Giraldi,
322 Elizabeth Drive,
Mt Pritchard 2170.
Ph: (02) 602 3117.

Victoria:

Barry Moore,
29 Robert Molyneux Drive,
Endeavour Hills 3802.
Ph: (03) 700 2397.

New South Wales

December 13: Annual BBQ at Brooklyn.
January 10: Trackwork laying clinic at Rydalmere.
February 14: Demonstration of Throttles, Zero 1 etc at Liverpool.
March 14: Running Session at Narrabeena.

CUB SETS Car Set Details "L" Type Cars

No.	In Service	Set details
CUB 80	1/1930	HFL351, BL354, BL356, RFL411, FL392, HFL368. Originally Red & Cream. Set condemned 11/1957.
CUB 81	1/1930	HFL380, BL339, BL413, RFL350, FL340, HFL365. Originally Red & Cream. HFL380, BL339, RFL350, FL340, HFL365. — 6/1978.
CUB 82	9/1930	HFL391, BL329, BL993, RFL33, FL330, HFL422. Originally Green & Cream. HFL391, BL329, BL993, FL33, FL330, HFL422. — 6/1978.
CUB 83	8/1930	HFL370, BL327, BL988, RFL337, FL398, HFL419. Originally Red & Russet. HFL370, BL327, BL988, FL398, HFL419. — 6/1978.
CUB 84	8/1930	HFL405, BL334, BL991, RFL37, FL333, HFL407. Originally Red & Russet. HFL405, BL334, BL991, FL333, HFL407. — 11/1977.
CUB 85	5/1933	HFL343, BL337, BL356, RFL418, FL355, HFL416. Originally Red & Russet. HFL343, BL337, BL356, RFL418, FL355, HFL416. — 6/1978.
CUB 86	9/1933	HFL336, BL394, BL395, RFL399, FL326, HFL383. Originally Blue & Cream. Set condemned 5/1963.
SET 86	9/1970	HFL325, CL358. Tuscan Red when set formed. HFL325, CL358. — 11/1977.

CUB 80 & 81 were repainted Red & Russet about 1933, CUB 82 & 86 were repainted Red & Russet about 1937/38. All sets painted Tuscan Red during late 1950s, early 1960s (exact dates unknown).

Original duties of some sets were CUB 80 & 81, Newcastle Express; CUB 82, South Coast Daylight Express; CUB 86, Caves Express.

Cars mentioned in above sets are only part of overall "L" car fleet.

Cars condemned since 3/1976; RFL37, FL389, BL397.

Cars converted since 3/1976; RFL33 to FL33. HFL Cars 364, 370, 380, 405, 407, 416, 422 (guards compartment enlarged, passenger capacity reduced to 28).

This is not intended as a complete record of 'L' cars, but as a guide for modellers who may wish to model 'CUB' sets that are currently available.

Phil Clarke

BINDERS FOR AMRM

Vinyl Magazine Binders of the 12 wire type are now available for AMRM. These accept 12 magazines, i.e. two years or one volume. Cost is 2 for \$9.00. Postage is \$1.50 for up to four (4) binders and \$2.00 for up to ten (10) binders in NSW. For readers in other parts of Australia postage is \$3.30 for up to ten (10) binders. A name sheet is available for 20¢. The binders will accept most other model railway magazines.

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Consider the cost.

Expanding a little on Brad Hinton's editorial this issue, and applying some basic figures to the models expected over the next six months, could frighten the bank manager. Just on the brass side there is the AD60, the D59 and the 442 (\$1272), the other locomotives include the 45 class metal kit, the Lima 42/S/GM and the ABL Models 48 class (\$164). One must always consider a couple of each of the Lima TAM/MCE coaches, and a 'GHG', 'HG' and 'LHG' (\$83), and if only three each of the injected styrene kits were obtained, what with the 'TRC', 'S', 'K', 'RU' and 'BCH' (\$112), not forgetting the occasional SAR kit or two (\$12) and a goods shed (\$16) sets a frightening amount of \$1659 without any of the incidentals required in the hobby. Fortunately there are very few in the hobby that would aim at meeting the shopping list, but for anyone with a desire to acquire samples of everything that comes on the market, a good bank manager or understanding wife (or both) would be a base requirement.

Electrics . . . is there a real interest?

Electric railways (suburban or main line) has a following without any doubt, but the question must always be raised as to there being sufficient interest to warrant mass production of locomotives and rolling stock to cater for this sectional interest. We have had the Triang suburban cars, but the second-hand market (usually a good guide for a healthy production schedule) does not reflect the same keenness-to-buy interest shown to other much wanted items. Now we have a limited run of the 85 class. Will there be enough to meet demand or will there be little interest?

Manufacturers every now and again ask the question as to the viability of electric railway traction as a commercial venture. Maybe a reader or two could expound the modellers side of the story.

Thanks Phil.

This issue is the last that Associate Editor, Phil Curnow, will be preparing (en toto) for readers. Phil, since May 1979, has been looking after the typesetting, proof reading and the layout/paste-up of the article content of the magazine. It is a time-consuming task, it being the reason Phil took over from Bob Gallagher, and the time aspect no doubt has a little bearing on Phil relinquishing the task. Fortunately Phil is not leaving the staff completely, for he is to continue as South Australian sub-editor, as well as writing special articles of his choice. Phil came to us with a lot of experience, for he has been Buffer Stop (SARMA journal) editor as well as editor of the (ARHS SA Division) Recorder. He will be missed for there is little doubt Phil has contributed much to the high standard of presentation that AMRM enjoys.

Commercial News

While the local scene may have been quiet at the Sydney Exhibition, the local producers, most of them catering for non-NSW interest, have been very busy.

Broad Gauge Models have introduced the goods shed kit (see Reviews) and a new organisation, Broad Gauge Bodies, has hit the scene in a big way. B.G.B. started off by introducing the SAR (ANR) 'M' van in two styles and as we go to press has released the SAR (ANR) 'OB' open wagon. We have also seen samples of the DWF four wheel box car that uses a Peco underframe. All kits are polyester castings but differ greatly from those we are used to, the main feature being the lack of bubbles/broken detail and the uniform thickness of the parts. B.G.B. also offers the added service of completed models and, if required, assembly tuition, but one would have to go to Adelaide to receive the latter. B.G.B. kits are available at major Adelaide and Melbourne outlets.

Samples of projected Broad Gauge Model products were also observed and further detail will be published as production is confirmed.

TRAX 'LCH' kits must be proving successful for, until a re-run, it was difficult to find a shop that had them in stock recently. Trax plans to release decal sheets for their products, the samples sighted illustrating sufficient decals for five wagons. While the 'TRC' has not (at the time of writing) been released, we have been advised that it should be available before this issue hits the streets. TRAX plans to follow the 'TRC' with the 'S' then the 'K' and 'RU' and then the 'CW' and 'BCW'. The current delay has been caused by the unavailability of tool making time in the production shops.

Another casualty of the tool maker is the AR kits 'BCH', although we have been advised that work has started on the die.

ABL Model Products have completed modifications on the GHG kit and it is now available. Samples of a projected model have been made available, it being an HO scale model of the NSW 48 class, being designed to use a Mehano final drive. It promises to be a real winner, especially for the modeller who cannot afford the relatively high cost of brass. Another projected model is the Baldwin bogie tender as used behind some Z19 class locomotives.

Stephen Johnson is back in business in a big way with an HO scale 'HG' brake van which was on sale at the Sydney exhibition, and will continue to remain on sale by mail order, for a period. Stephen is working on a NSWGR 'LHG' brake van for his next quantity sale. It is important to note that Stephen is rather new to the hobby and to the technique he has so quickly mastered. The quality of his workmanship is nearing the very high standard set by Doug Bocking, in his too brief Australian stay.

While on the subject, we have regretfully received word that Doug Bocking is seriously ill at present. While we are not at liberty to reveal any detail, we can on behalf of AMRM staff and readers wish Doug a speedy recovery to good health.

Accordingly Rail Kits Australia advise that their projected products have been placed in limbo for the foreseeable future. Further information will be published as circumstances change.

Fybren Models 'N' scale ELX kit is now readily available, and while further projects are planned, a delay is planned until the popularity of the ELX and thus the N scale market, can be accurately gauged.

Bergs Hobbies, in between changing addresses once again, have on display a sample of the 'TRC' kit (metal castings) and the 45 class diesel loco kit, both from New Zealand. The 45 class looks the part and is designed to be motorised with a Mehano mech. At \$55 less mech, here is a kit for those who cannot afford brass. Also on display, as these notes were being prepared, was the first pilot sample of the projected D59 class. Although it is only a very basic shell detailed with castings that were on hand (in Korea), the sample shows the lines of the D59 class. At present, delivery is expected in January 1981. To date, the bulk of the Bergs 'S' wagons have not yet arrived, nor has any sign of the projected 'K' wagon.

David Anderson, of Mansfield Hobbies, after the success of the 43 class, has confirmed the production run of the NSW 442 class, the model being expected in March, 1981. Response for more 43 class locomotives has been so great that a further (small) run is planned.

Some lucky modellers are able, at present, to pick up a new VR 'S' class diesel, for some are available at present packed in sets. Delivery of the single units is not expected until very late 1980 or early 1981.

If the LIMA TAM coaches do arrive less roof vents, modellers will be able to add accurate detail with vents from the FSM range.

Friedmont Models have added a 48 class loco kit to their diesel range.

Electric fans, who are quick and lucky, can acquire NSW 85 class loco kits from Toyman Imports, the unit being designed to be powered by a Joueff mech. A very limited run is expected, so only the quick will get the goods.

Liberty Trading have advised that they expect to make some of the Airfix British OO scale range available in the near future. The Australia stock will be limited only to those items in the Airfix range that are not duplicated by other brands.

The Engine Shed has advised of a few new items to their line of imports. Additions to the Herpa vehicle range include Volvo F12 semi-trailer tanker and box van, Citroen 2 CV 6, Renault R4, Range Rover and Jaguar XJ 6/12. An attractive addition to the Minitrax range is the HORNBY MINITRIX A4 Mallard in N scale. As time and space permits the prementioned items will be covered in the Review section.

St George Hobbies has released buffers (brass turnings) for the TRAX 'LCH' and BERGS 'S' wagon. Designed to be added to the buffer beams, these detail items will predate the new injected mouldings back to the steam era.

Samples of VR HO scale diesel bodies have been sighted and more information will be published next issue. To date the one piece castings have included the 'Y', the first series 'X' and first series 'T', all made to fit various Athearn chassis.

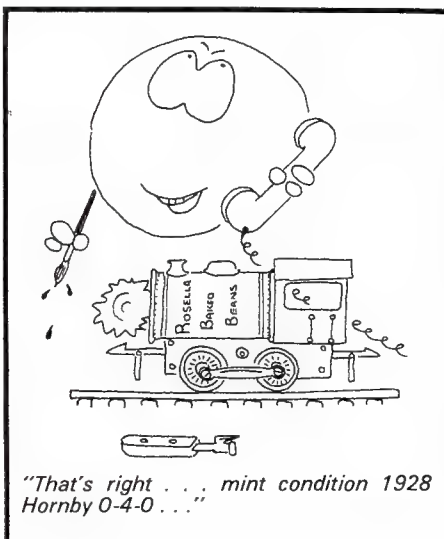
Production samples of Lima (VR) ELX and the TAM

bogie are to hand. The detail of the ELX is consistent with the standard we have come to expect from Lima, especially the detailed undergear. The bogie is superb! No other words could adequately describe it.

Weico Models advise that they are producing VR 'Spirit of Progress' cars in 'N' scale. The 'kit' is a performed brass body, painted, with castings to complete the model. At present the kits are only available from McBees Hobby Centre. Also planned is a small range of metal castings in 'N' & 'HO' scales. The correct bogies for under Fybren 'ELX' is first off the line as well as 4 wheel wagon W irons. The 'GY' style of axle box is to follow.

Next Issue . . . COLOUR.

Next issue, January/February 1981, we propose to cover a few of the selected subjects with colour. If you do not have a permanent order, you should reserve it now so as not to miss out. If you are a dealer, and require more copies, please order before we go to press.



CAN YOU HELP?

For the preparation of future articles in AMRM, we need information on the following classes of NSW goods vehicles:

- NHG Brake Vans painted red.
- FHG Brake Vans with modified body styling — and logos carried by any of these vans.
- IHG Brake Vans — logos currently carried by cars 31689-31694 and 31697-31700.
- PHG Brake Vans fitted with sliding doors in the perishable compartment (if any vans with this feature existed apart from the 25600 series units).
- MB Box Cars known to have, or have had, 'Mansard' type roofs.
- MBC Box Cars painted white with blank sideboards or having evidence that such boards may have been formerly fitted.

Please direct information to the co-ordinator of these projects, Mr P. Rogers, PO Box 235, Matraville, NSW 2036.

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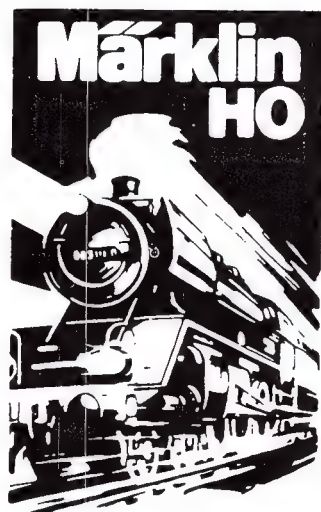
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ROLLING STOCK WHEELS

These 10mm wheels, disc or 8-spoke, were reviewed by this magazine on the advance sample, and minor changes occurred in production wheels. They have since been inspected by the Australian Model Railway Association's Standards Committee and said to be of good quality and have close adherence to standards. The features of these wheels are:—

1. Non-rusting nickel silver tyres keyed to the plastic centre and so cannot fall off;
2. Centres of injection moulded high impact polystyrene plastic;
3. Non-rusting stainless steel pin point axles of 1/16th of an inch diameter;
4. Wheels will not accidentally move on axles;
5. Back-to-back tolerance 14.35mm to 14.50mm;
6. Bearings of high impact polystyrene plastic which do not require lubrication, except graphite taken from a soft lead pencil may be used if required, and bearings are a press fit into a 2.4mm hole in axleguard etc.;
7. 100% manufactured in Australia, and proudly so.

Currently the nominated retail price is \$1.95 per set of four wheels on two axles and we supply retailers with bearings on which they put their own price, as many situations do not require bearings.

We need to sell some of the production by retail, and to this end packets of 12 axles are available at \$12 including postage with bearings included, disc or spoked.

We hoped to be able to print a list of the retailers from whom they could be obtained, as production is limited by fatigue and type of machinery in use, but a stable list is not yet settled, so we'll have to leave this till next issue. A certain number of wheels can be produced each month and are, so whilst production might be below demand, it is at the moment, constant. Whatever happens the quality will be maintained.

*

PARTS FOR LOCOS & ROLLING STOCK

Generally speaking these are in stock. We've had to instal new plant and we're in the middle of a growing pains area, from which we hope to emerge shortly.

*

PROJECT: RE-MAKE N SCALE C38

This is partly dependant on getting the above machines to do what we want them to, but we are hopeful of some result early in the New Year.

*

PROJECT: Z20 NSWGR LOCO IN HO

It took 5 years to put the C38 on the market, but we hope this project doesn't take that long, but we're already well into the second year.

*

AUSTRALIAN PRODUCTION GENERALLY

We are interested to see the efforts of a number of other producers in Australia. With our small population we are in no position to go in for mass-production methods which can get prices down, and we think that patience and understanding by Railway Modellers will be a big help in future endeavours in this direction. It is interesting to note that all the kits and bits and pieces produced in Australia measure up more than favourably with the best of overseas production. Australians might project an image of a bloke in a slouch hat sitting on a post & rail fence in the mulga chewing a grass stalk, but in real fact Australian workmanship is second to none, and we in Australia have no need to touch our forelock to anyone. "Proudly made in Australia" is a good thing to be able to say.

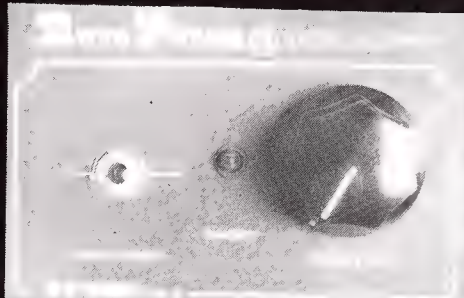
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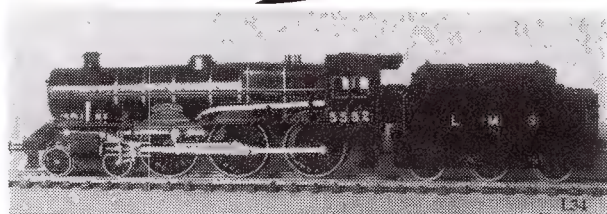
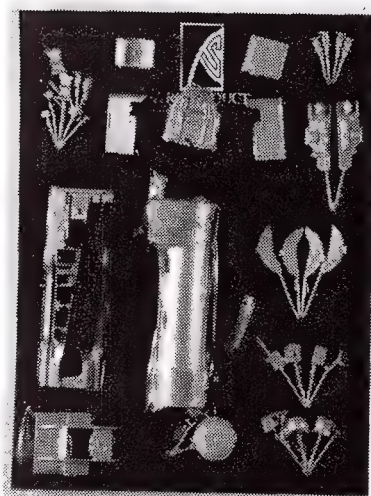
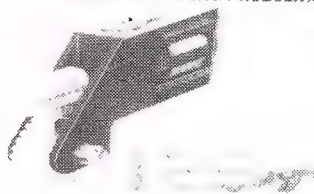
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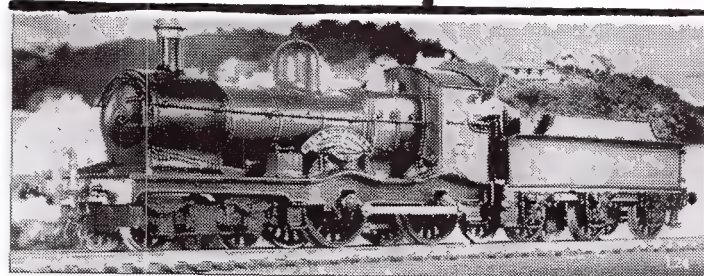
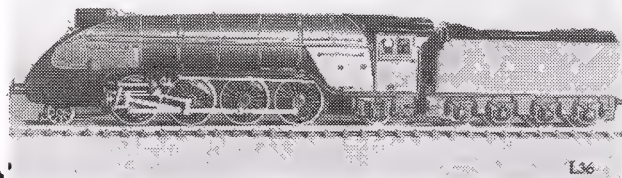
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LMS 5x5p JUBILEE

191 of these locomotives were built between 1934-37 and could be seen on any section of the L.M.S. until the final days of steam. The kit is supplied with optional boiler fittings, etched valve gear and three pairs of etched name plates.

LNER P2 2-8-2

The most beautiful streamlined locomotive ever produced? A class of six, four built in streamlined form and two rebuilt from earlier experimental engines. The kit is supplied with all six name plates and full Walshaerts valve gear.



GWR 3252 DUKE 4-4-0

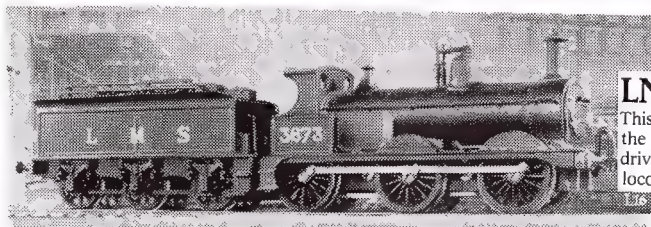
Numbered 3252-3291 these locomotives were all named and, in their early days, lined. They make an ideal shed companion to the Bulldog (Kit L. 3). The class was built from 1895 to 1899 and about half a dozen survived through to the early BR days. The model depicts the 1903 versions with the standard boiler.

GWR 28xx 2-8-0

This class of engines were introduced in 1903 and were the first 2-8-0's in the country and were probably the best ever produced. There were 133 engines, the first being scrapped in 1958, the last 1960. The model is supplied with both types of cab.

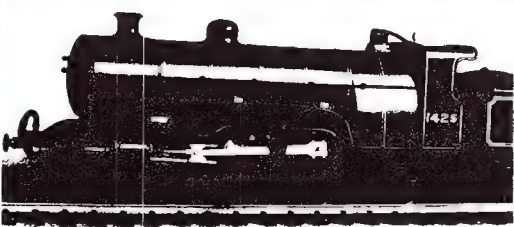
LMS JOHNSON 2F 0-6-0

When 58182 drew its last breath in 1964, the oldest locomotive still in service with BR was mourned. Over 850 of these typically Victorian engines were built from 1875 with many variations. The model represents the original version.



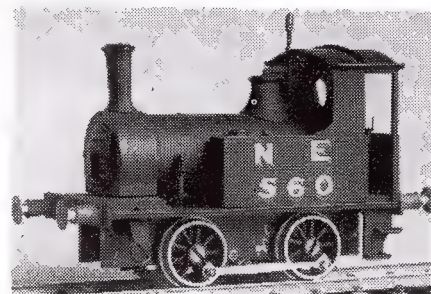
LNER Ex NE Y8

This quaint little 0-4-0 built in 1890 lasted through to B.R., the last being scrapped in 1956. It had only three foot diameter driving wheels and must have been one of the smallest 'main-line' locomotives ever built. A simple kit.



LNER (EX GN) ATLANTIC 4-4-2

Some 80 engines of this class were built between 1904 and 1908. They were powerful but graceful and highly thought of by their crews. Used mainly on fast passenger trains, they were generally considered one of the best pre-war locomotives. The model represents the post 1911 version and is supplied with the later LNER fittings.



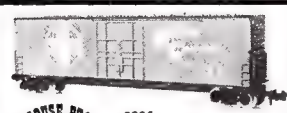
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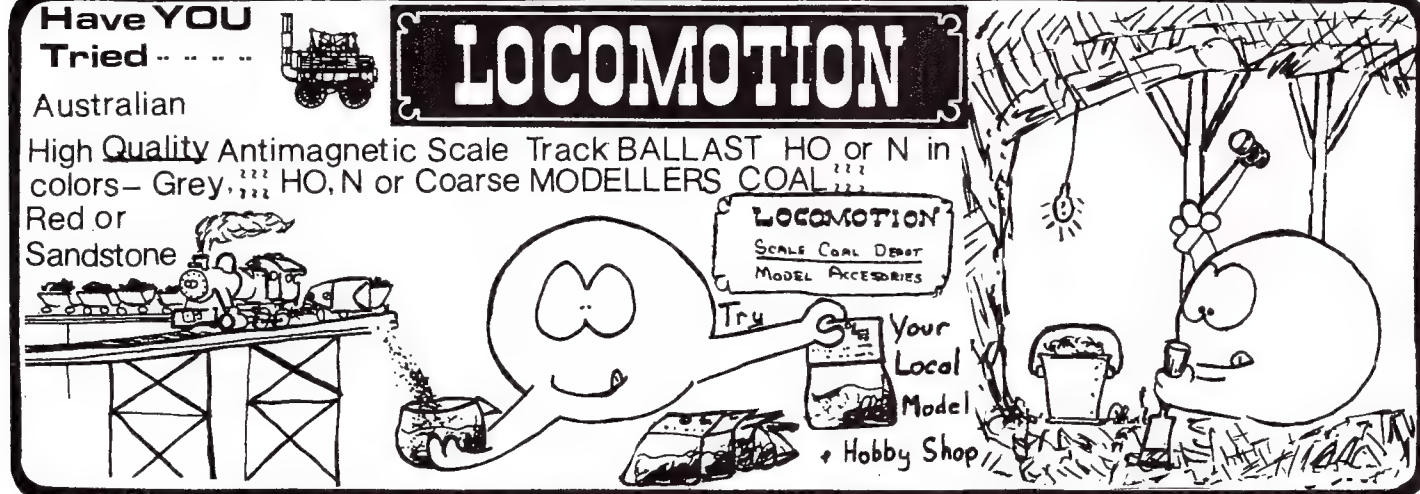
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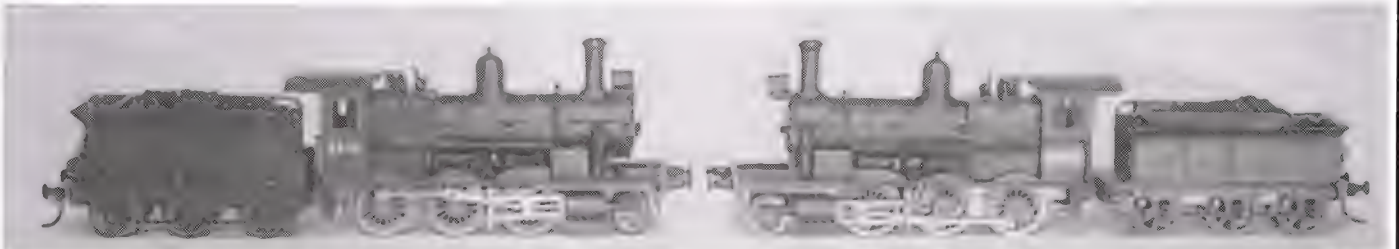
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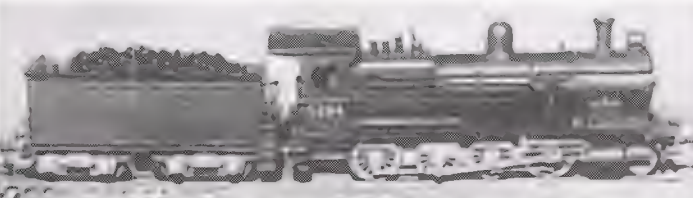
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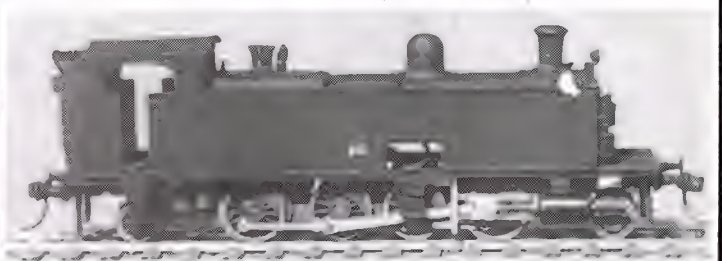
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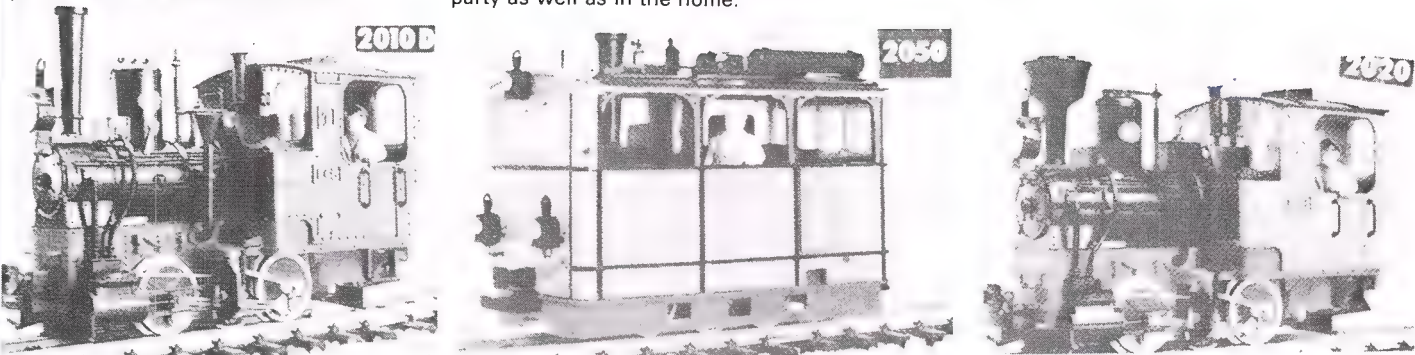


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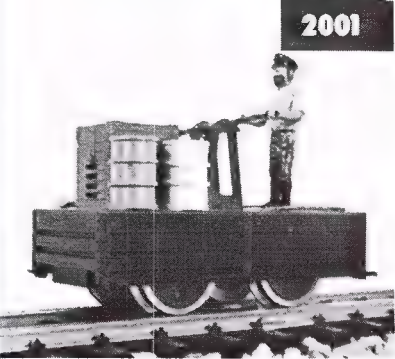
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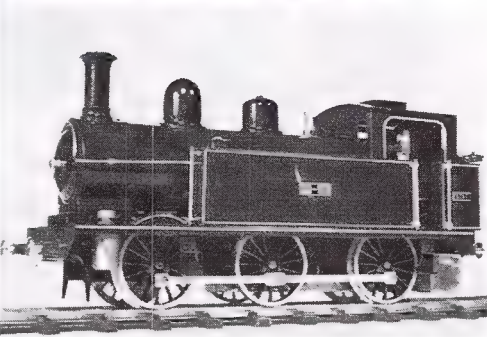
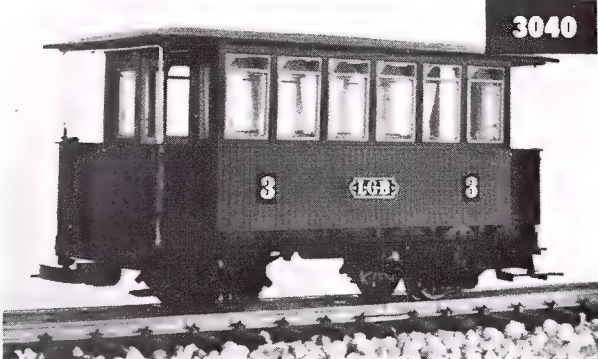
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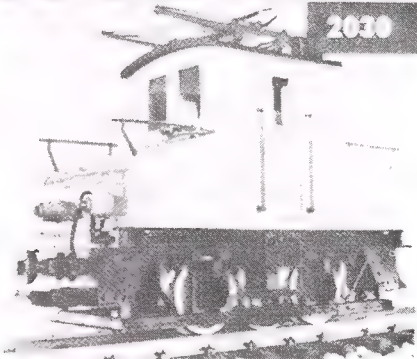
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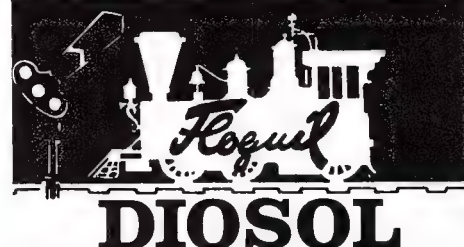
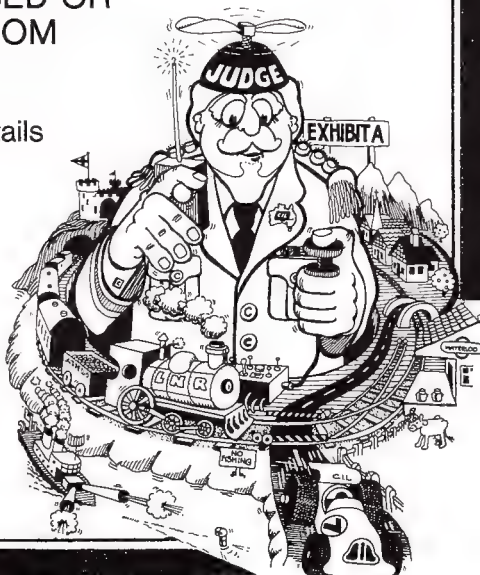
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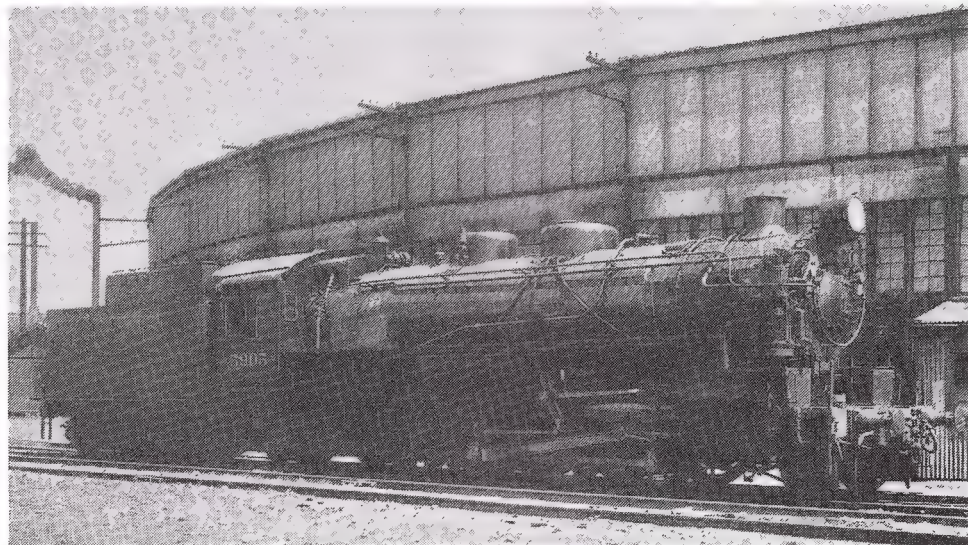


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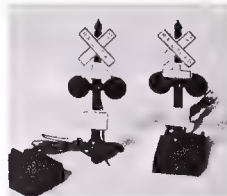
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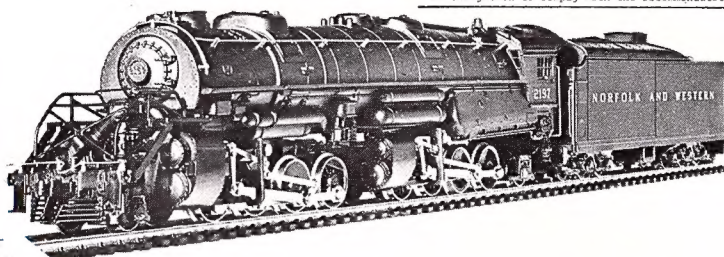
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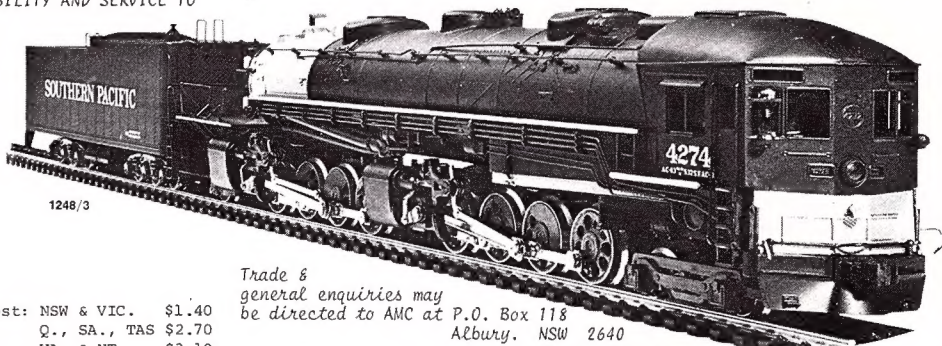


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